

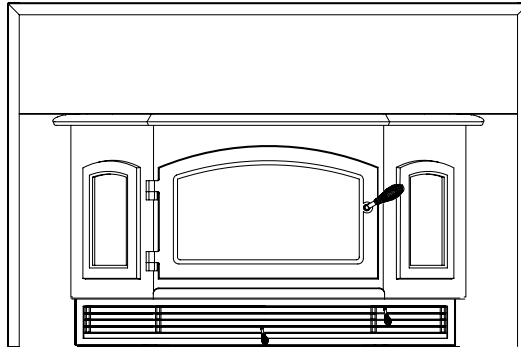
# QUADRA-FIRE®

## 5100-I ACT WOOD INSERT

### Advanced Combustion Technology (ACT)

**Model:**

**5100I-GD-B**  
**5100I-NL-B**



Tested and  
Listed by  Portland  
Oregon USA  
C US  
OMNI-Test Laboratories, Inc.

### NOTICE



#### DO NOT DISCARD THIS MANUAL

- Important operating and maintenance instructions included.
- Read, understand and follow these instructions for safe installation and operation.
- Leave this manual with party responsible for use and operation.



### WARNING



If the information in these instructions is not followed exactly, a fire may result causing property damage, personal injury, or death.

- Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.
- Do not overfire - If heater or chimney connector glows, you are overfiring. Overfiring will void your warranty.
- Comply with all minimum clearances to combustibles as specified. Failure to comply may cause house fire.

### WARNING



#### HOT SURFACES!

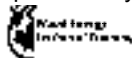
Glass and other surfaces are hot during operation AND cool down.

#### Hot glass will cause burns.

- Do not touch glass until it is cooled
  - NEVER allow children to touch glass
  - Keep children away
  - CAREFULLY SUPERVISE children in the same room as appliance
  - Alert children and adults to hazards of high temperatures
- High temperatures may ignite clothing or other flammable materials.**
- Keep clothing, furniture, draperies and other combustibles away.



Installation and service of this appliance should be performed by qualified personnel. Hearth & Home Technologies recommends NFI certified professionals, or technicians supervised by an NFI certified professional.



### WARNING



#### Fire Risk.

For use with solid wood fuel only. Other fuels may overfire and generate poisonous gases (i.e. carbon monoxide).



**and Welcome to the Quadra-Fire Family!**

Hearth & Home Technologies welcomes you to our tradition of excellence! In choosing a Quadra-Fire appliance, you have our assurance of commitment to quality, durability, and performance.

This commitment begins with our research of the market, including 'Voice of the Customer' contacts, ensuring we make products that will satisfy your needs. Our Research and Development facility then employs the world's most advanced technology to

achieve the optimum operation of our stoves, inserts and fireplaces. And yet we are old-fashioned when it comes to craftsmanship. Each unit is meticulously fabricated and surfaces are hand-finished for lasting beauty and enjoyment. Our pledge to quality is completed as each model undergoes a quality control inspection. We wish you and your family many years of enjoyment in the warmth and comfort of your hearth appliance. Thank you for choosing Quadra-Fire.

**SAMPLE OF SERIAL NUMBER / SAFETY LABEL**

**LOCATION: On right side of insert as face the appliance**

**CAUTION:** HOT WHILE IN OPERATION DO NOT TOUCH, KEEP CHILDREN AND CLOTHING AWAY. CONTACT MAY CAUSE SKIN BURNS. KEEP FURNISHINGS AND OTHER COMBUSTIBLE MATERIAL FAR AWAY FROM THE APPLIANCE. SEE NAMEPLATE AND INSTRUCTIONS.

**ATTENTION:** CHAUD LORS DE L'OPÉRATION. NE PAS TOUCHER. GARDEZ LES ENFANTS ET LES VÊTEMENTS LOIN DE L'ESPACE DÉSIGNÉ DE L'INSTALLATION. LE CONTACT PEUT CAUSER DES BRÛLURES À LA PEAU. GARDEZ LES MEUBLES ET LES MATÉRIEAUX COMBUSTIBLES LOIN DE L'ESPACE DE L'APPAREIL. VOIR L'ÉTIQUETTE ET LES INSTRUCTIONS.

Tested and Listed by **OMNI-Test Laboratories, Inc.** Report: 061-S-12-2

**QUADRA-FIRE** Model / Modèle: **5100-I ACT INSERT** Serial Number: **007**

LISTED ROOM HEATER, SOLID FUEL TYPE. "For Use with Solid Wood Fuel Only." Also for use in Mobile Home (UM) 84 HUD.

**PREVENT HOUSE FIRES**

Install and use only in accordance with manufacturer's installation, venting and operating instructions. CONTACT YOUR LOCAL BUILDING OR FIRE OFFICIALS ABOUT RESTRICTIONS AND INSTALLATION INSPECTION IN YOUR AREA.

Refer to manufacturer's instructions and local codes for precautions required for passing chimney through a combustible wall or ceiling.

WARNING - For Mobile Homes: Do not install in a sleeping room. An outside combustion air inlet must be provided and unrestricted while unit is in use. The structural integrity of the mobile home floor, ceiling and walls must be maintained. The insert must be properly grounded to the frame of the mobile home. A complete relining of the chimney system with a 6" diameter listed stainless liner is required. Must be equipped with a spark arrestor cap. Outside Air comes standard on the insert and must be installed before operating insert.

When used as a masonry insert stove, install only in a masonry fireplace built to UBC Chapter 37. Do not remove brick or mortar to accommodate insert. Installation requires minimum of a starter pipe into existing chimney with airtight face seal.

Install only on a non-combustible hearth. Approved for installation and use in factory built zero-clearance fireplaces conforming to minimum fire chamber specifications (USA only).

Components required for installation: positive or direct flue connection assembly or listed vent liner.

In Canada a full length 6" S635 flue liner is required as per ULC S635.

WARNING - Inspect and clean chimney frequently. Under certain conditions...

**APPAREIL DE CHAUFFAGE DE PIÈCE, DE TYPE DE COMBUSTIBLE SOLIDE.** "Pour Usage Avec Bois Solide Sûrement" Pour usage dans les maisons mobiles (UM)84 HUD

**PRÉVENTION DES FEUX DE MAISON**

Installez et utilisez en accord avec les instructions d'installation et d'opération du fabricant. CONTACTEZ LE BUREAU DE LA CONSTRUCTION OU LE BUREAU DES INCENDIES AU SUJET DES RESTRICTIONS ET DES INSPECTIONS D'INSTALLATION DANS VOTRE VOISINAGE.

Référez vous aux instructions du fabricant et des codes locaux pour les précautions requises pour passer une cheminée à travers un mur ou un plafond combustibles, et les compensations maximums.

AVIS - Pour Les Maisons Mobiles: Ne pas installer dans une chambre à coucher. Un tuyau extérieur de combustion d'air doit être installé et ne doit pas être obstrué lorsque l'appareil est en usage. La structure intégrale du plancher, du plafond et des murs de la maison mobile doit être maintenue intacte. L'appareil de chauffage doit être fixé à la charnière de la maison mobile.

Lorsque vous utilisez un modèle inséré fabriqué en briques, installez un foyer en briques fabriqué selon le Chapitre 37. Ne pas enlever de la brique ou du mortier pour accommoder la pièce insérée. L'installation demande un tuyau allant de la cheminée existante avec un couvert hermétique.

Utiliser seulement sur un foyer incombustible. Approuvé pour l'installation et usage dans les cheminées avec espace libre de zéro, fabriquées en usine et se conformant aux spécifications de chambre de combustion minimum.

ATTENTION! Inspectez et nettoyez la cheminée fréquemment. Sous certaines conditions, il se peut que la créosote s'accumule rapidement.

Ne pas connecter cet appareil à une cheminée servant un autre appareil.

DANGER: Il y a un risque de décharge électrique. Déconnectez le fil électrique de la prise de courant avant le service.

**Serial Number**

**Model Name**

**Test Lab & Report No.**

Maximum Mantel Depth - 8" (203mm)  
Profondeur Maximale du Manteau de Cheminée

Mantel / Manteau de Cheminée

Fascia or Trim / Panneau ou Moulure

Side Wall / Mur de Côté

Insert / Pièce Insérée

Hearth Extension / Extension de l'âtre

Non-combustible floor protector must be a minimum 1/2" (13mm) thickness (k value = 0.84) and extend 8" (203mm) to both sides.

La protection de plancher non-combustible doit être d'un minimum de 1/2" d'épaisseur (k value = 0.84) et étendue à 8" (203 mm) de chaque côté.

Masonry, Heat Exchanger & "Zero Clearance En briques, Circulant la chaleur & d'espace libre"	A	B	C	D
with 5" (127mm) Mantel Deflector avec un déflecteur de cheminée de 5" (127 mm)	12"/305mm	40"/1015mm	35"/889mm	7"/178mm
with 8" (203mm) Mantel Deflector avec un déflecteur de cheminée de 8" (203 mm)	12"/305mm	31"/787mm	20"/508mm	7"/178mm
*Zero Clearance Installations USA Only *Installation avec espace libre de zéro seulement aux États-Unis	12"/305mm	27"/686mm	16"/406mm	7"/178mm

FLOOR PROTECTION / PROTECTION DU PLANCHER	E	F	TRIM / Panneau
USA/États-Unis	16"/406mm	8"/203mm	Side Trim 1-1/2" (38mm) thick Muir Panneau
CANADA	18"/457mm	8"/203mm	Top Trim 3/4" (19mm) thick Haut Panneau

US Patents 4,766,876; 5,113,843; 5,341,794  
Brevet US 4,766,876; 5,113,843; 5,341,794

Manufactured by / Fabriqué par: **HEARTH & HOME**

1445 N. Highway, Cobleskill, NY 12514  
www.quadrafire.com

U.S. ENVIRONMENTAL PROTECTION AGENCY - Certified to comply with July 1990 particulate emission standards.

2004	2005	2006	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Made in U.S.A. / Fait Aux États-Unis      DO NOT REMOVE THIS LABEL / NE PAS ENLEVER L'ÉTIQUETTE      438-0390

**Manufactured Date**

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# 1

## Listing and Code Approvals

### A. Appliance Certification

<b>MODEL:</b>	5100-I ACT Wood Insert
<b>LABORATORY:</b>	OMNI Test Laboratories, Inc.
<b>REPORT NO.</b>	061-S-59-2
<b>TYPE:</b>	Wood Stove
<b>STANDARD:</b>	UL1482 and ULC S628 and (UM) 84-HUD, Mobile Home Approved.

The Quadra-Fire 5100-I ACT Wood Inserts meets the U.S. Environmental Protection Agency's 1990 particulate emission standards.

### B. Mobile Home Approved

This appliance is approved for mobile home installations when not installed in a sleeping room and when an outside combustion air inlet is provided. The structural integrity of the mobile home floor, ceiling, and walls must be maintained. The appliance must be properly grounded to the frame of the mobile home and use only listed double-wall connector pipe. An Outside Air Kit comes standard on the appliance and must be installed in a mobile home installation.

### C. Glass Specifications

This appliance is equipped with 5mm ceramic glass. Replace glass only with 5mm ceramic glass. Please contact your dealer for replacement glass.

**NOTE:** This installation must conform with local codes. In the absence of local codes you must comply with the **UL1482, (UM) 84-HUD and NFPA211** in the U.S.A. and the **ULC S628 and CAN/CSA-B365 Installation Codes** in Canada.

### D. BTU & Efficiency Specifications

EPA Certified	1.98 grams/hour
Efficiency	75.5% on Medium
BTU - EPA	50,800
Heating Capacity	up to 3,500 sq ft
Maximum Log Length	21 inches
Firebox Capacity	3.0 cubic feet
Weight	520 lbs

**NOTE:** Hearth & Home Technologies grants no warranty, implied or stated, for the installation or maintenance of this unit and assumes no responsibility for any consequential damage(s).

 **WARNING**

Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to the owner's information manual provided with this appliance. For assistance or additional information consult a qualified installer, service agency or your dealer.

# 2

## Getting Started



### WARNING



#### Fire Risk

- HOT while in operation and after fire is out.
- DO NOT operate without protective barrier.

### A. Design, Installation & Location Considerations

Consideration must be given to:

- Safety
- Convenience
- Traffic flow
- Chimney and chimney connector required

It is a good idea to plan your installation on paper, using exact measurements for clearances and floor protection, before actually beginning the installation.

We recommend that a qualified building inspector and your insurance company representative review your plans before and after installation.

If this appliance is in an area where children may be near it is recommended that you purchase a decorative barrier to go in front of the appliance. Remember to always keep children away while it is operating and do not let anyone operate this appliance unless they are familiar with these operating instructions.

### CAUTION

Check building codes prior to installation.

- Installation MUST comply with local, regional, state and national codes and regulations.
- Consult insurance carrier, local building, fire officials or authorities having jurisdiction about restrictions, installation inspection, and permits.



### WARNING



#### Asphyxiation Risk.

- Do NOT connect this unit to a chimney flue servicing another appliance.
  - Do NOT connect to any air distribution duct or system.
- May allow flue gases to enter the house.

### B. Fire Safety

To provide reasonable fire safety, the following should be given serious consideration:

1. Install at least one smoke detector on each floor of your home to ensure your safety. They should be located away from the heating appliance and close to the sleeping areas. Follow the smoke detector manufacturer's placement and installation instructions, and be sure to maintain regularly.
2. A conveniently located Class A fire extinguisher to contend with small fires resulting from burning embers.
3. A practiced evacuation plan, consisting of at least two escape routes.
4. A plan to deal with a chimney fire as follows:

In the event of a chimney fire:

- a. Evacuate the house immediately
- b. Notify fire department



### WARNING



#### Fire Risk.

Hearth & Home Technologies disclaims any responsibility for, and the warranty will be voided by, the following actions:

- Installation and use of any damaged appliance.
- Modification of the appliance.
- Installation other than as instructed by Hearth & Home Technologies.
- Installation and/or use of any component part not approved by Hearth & Home Technologies.
- Operating appliance without fully assembling all components.
- Operating appliance without legs attached (if supplied with unit).
- Do NOT Overfire - If appliance or chimney connector glows, you are overfiring.

**Any such action that may cause a fire hazard.**



### WARNING



#### Fire Risk.



- Do not operate appliance before reading and understanding operating instructions.
- Failure to operate appliance properly may cause a house fire.

**C. Negative Pressure**

Draft is the pressure difference needed to vent appliances successfully. Considerations for successful draft include:

- Preventing negative pressure
- Location of appliance and chimney


**Negative pressure** results from the imbalance of air available for the fireplace to operate properly. Causes for this imbalance include:

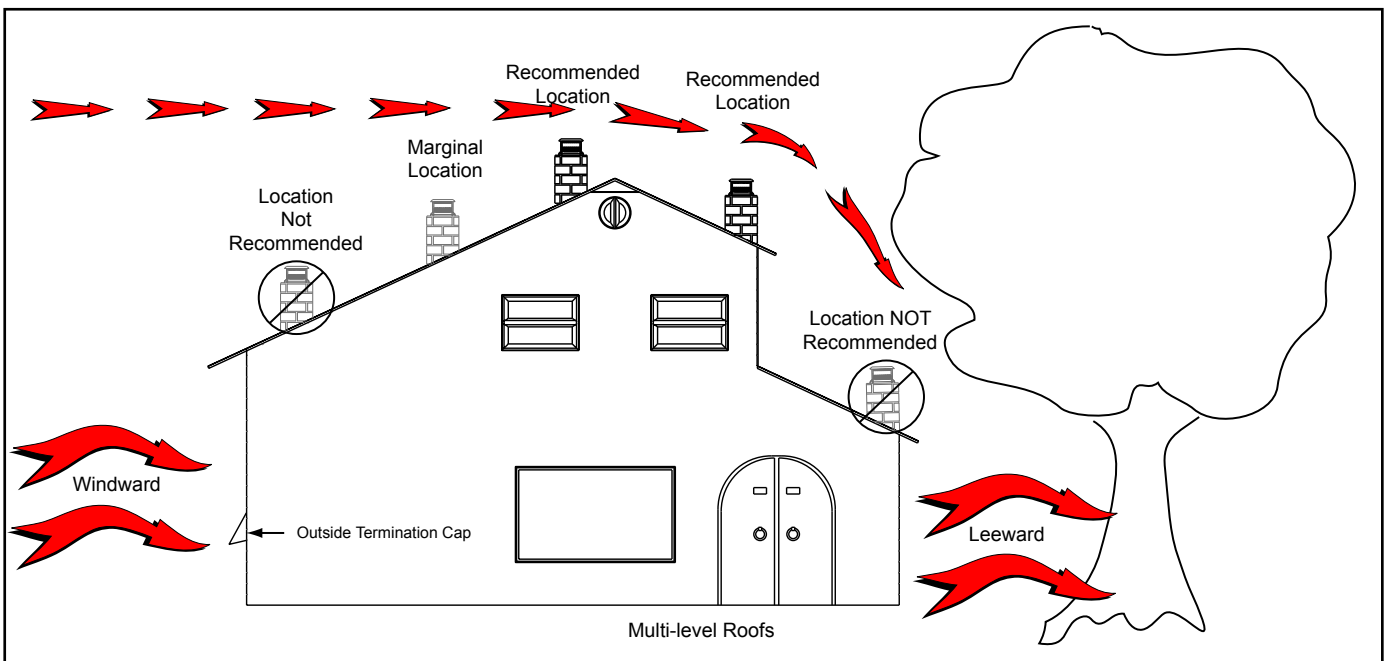
- Exhaust fans (kitchen, bath) etc.)
- Range hoods
- Combustion air requirements for furnaces, water heaters and other combustion appliances
- Clothes dryers
- Location of return-air vents to furnace or air conditioning
- Imbalances of HVAC air handling system
- Upper level air leaks
  - Recessed lighting
  - Attic hatch opening
  - Duct leaks

To minimize the affects of negative air pressure the following must be considered:

- Install the outside air kit. Install the intake on the side of the house towards prevailing winds during the heating season.
- Ensure adequate outdoor air is supplied for combustion appliances and exhaust equipment.

- Ensure furnace and air conditioning return vents are not located in the immediate vicinity of the appliance,
- Avoid installing the appliance near doors, walkways or small isolated spaces.
- Recessed lighting should be of “sealed can” design; attic hatches weather stripped or sealed; and attic mounted ductwork and air handler joints and seams taped or sealed.

	<p><b>WARNING</b></p> <p>Asphyxiation Risk.</p> <ul style="list-style-type: none"> <li>• Negative pressure can cause spillage of combustion fumes and soot</li> <li>• Appliance needs to draft properly for safety.</li> </ul>
---	--



**Figure 6.1**

## D. Flue Draft Considerations

Location of the appliance and chimney will affect performance. As shown in **Figure 6.1** the chimney should:

- Be installed through the warm space enclosed by the building envelope. This helps to produce more draft, especially during lighting and die down of the fire.
- Penetrate the highest part of the roof. This minimizes the affects of wind turbulence.
- Consider the appliance location to the floor and ceiling attic joists.

Exterior conditions such as roof line, surrounding trees, prevailing winds and nearby hills can influence appliance performance. Your local dealer is the expert in your geographic area and can usually make suggestions or discover solutions that will easily correct your flue problem.

To be sure that your appliance burns properly, the chimney draft (static pressure) should be approximately -.10 inch water column (W.C.) during a high burn and -.04 inch W.C. during a low burn, measured 6 inches (152mm) above the top of the appliance after one hour of operation at each burn setting.

**NOTE:** These are guidelines only, and may vary somewhat for individual installations.


## E. Tools And Supplies Needed

Before beginning the installation be sure that the following tools and building supplies are available.

Reciprocating saw	Framing Material
Pliers	Hi-Temp Caulking Material
Hammer	Gloves
Phillips Screwdriver	Framing Square
Flat Blade Screwdriver	Electric Drill & Bits (1/4")
Plumb Line	Safety Glasses
Level	1/2" - 3/4" length, #6 or #8 self drilling screws (you will need 3 per pipe section connection +10)
Tape Measure	

## F. Inspect Appliance and Components

- Open the appliance and remove all the parts and articles packed inside.
- Inspect all the parts and glass for shipping damage.
- Contact your dealer if any irregularities are noticed.
- Removed all labels from the glass doors.
- Wipe clean all plated surfaces before first fire.

	<b>WARNING</b>
	<p>Inspect appliance and components for damage. Damaged parts may impair safe operation.</p> <ul style="list-style-type: none"> <li>• Do NOT install damaged components.</li> <li>• Do NOT install incomplete components.</li> <li>• Do NOT install substitute components.</li> </ul> <p>Report damaged parts to dealer.</p>

# 3 Dimensions and Clearances

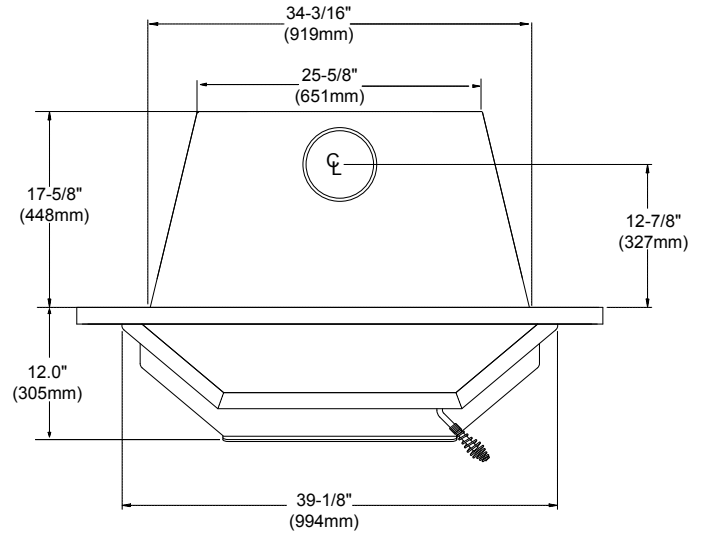
## A. Appliance Dimensions

**NOTE: Flue Collar: 6 inch (152mm) diameter (ID)**

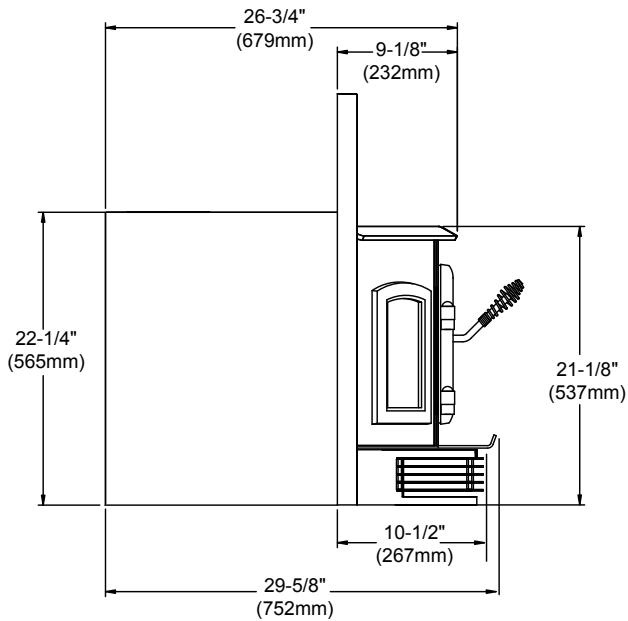
**NOTE:**

- Illustrations and photos reflect typical installations and are FOR DESIGN PURPOSES ONLY.
- Illustrations/diagrams are not drawn to scale.
- Actual installation/appearance may vary due to individual design preference.
- Hearth & Home Technologies reserves the right to alter its products.

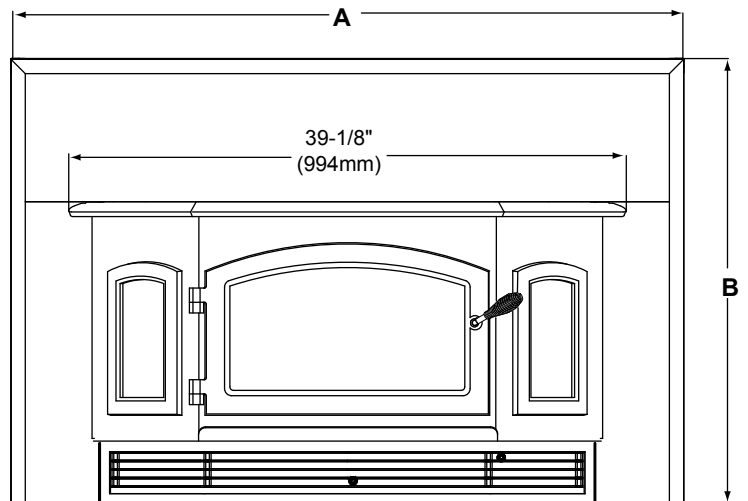
**TOP VIEW**



**SIDE VIEW**



**FRONT VIEW**



Panel Size	A	B
Standard	47 in.	30-1/2 in.
Large	51-1/4 in.	34-1/4 in.

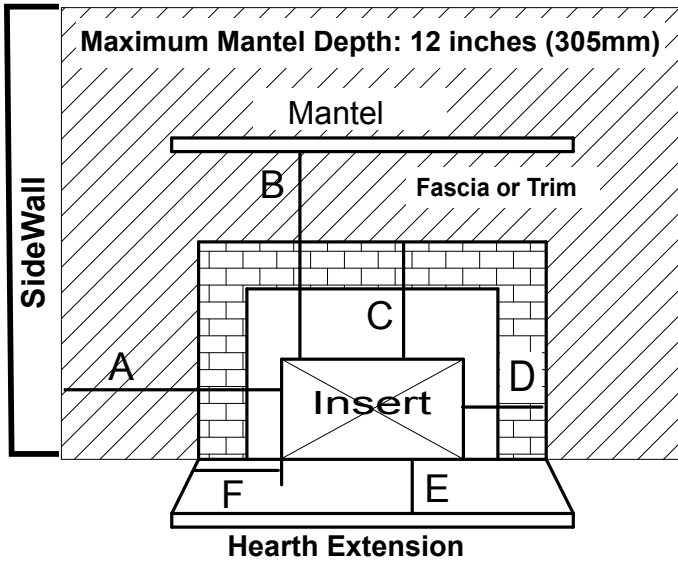


**B. Clearance to Combustibles**

In Canada a full length 6 inch (152mm) ULC S635 flue liner required as per ULC S628.

**NOTE:** When installing into a masonry fireplace, the fireplace must be built to UBC Chapter 37 standards. Do not remove brick or mortar from masonry fireplace to accommodate insert. The permanent metal warning plate provided must be attached to the back of the fireplace stating the fireplace may have been altered to accommodate the insert and must be returned to original condition for use as a conventional fireplace.

**NOTE:** Clearances may only be reduced by means approved by the regulatory authority having jurisdiction.



	A	B	C	D	E	F
<b>INSTALLATION: Masonry, Heat Circulating and *Zero Clearance</b>	12" (305)	40" (1016)	35" (889)	7" (178)	16" (406) 18" (450) Canada	8" (200)
<b>With 8" Mantel Deflector, Part No. 831-1530</b>	12" (305)	27" (686)	16" (406)	7" (178)	16" (406) 18" (450) Canada	8" (200)
<b>Maximum Mantel Depth: 12 inches (305mm)</b>						
*Zero Clearance in USA Only.						

**C. Optional Mantel Deflector**

Optional mantel deflectors may be purchased from your dealer to reduce clearances to a mantel. An 8 inch (203mm) deflector allows a reduction down to 27 inches (686mm).

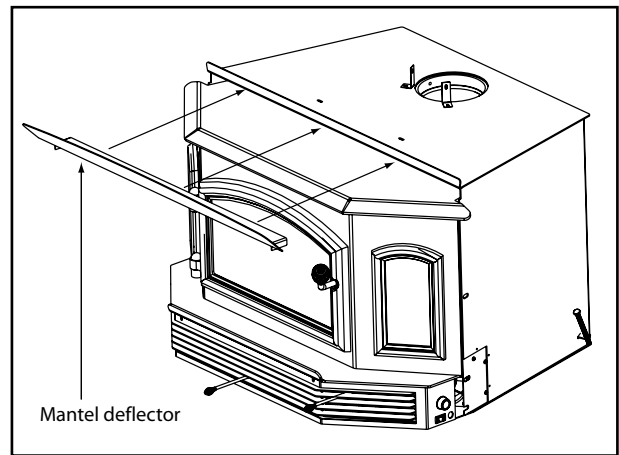


Figure 9.1

		<b>WARNING</b>
	<p>Fire Risk.</p> <ul style="list-style-type: none"> <li>Comply with all minimum clearances to combustibles as specified.</li> <li>Failure to comply may cause fire.</li> </ul>	

# 4 Installation Considerations

## A. Floor Protection USA & Canada

Thermal protection must be 1/2 inch (13mm) minimum thickness ("k" value = 0.84) or equivalent material.

All floor protection must be non-combustible (i.e., metals, brick, stone, mineral fiber boards, etc.). Any organic materials (i.e., plastics, wood paper products, etc.) are combustible and must not be used. The floor protection specified includes some form of thermal designation such as R-value (thermal resistance) or k-factor (thermal conductivity).

## B. Calculating Alternate Floor Protection Material

### Thermal Conductivity: k value

The k value indicates the amount of heat (in BTU's) that will flow in 1 hour through 1 square foot of a uniform material 1 inch thick for each degree (F) of temperature difference from one side of the material to the other. The LOWER the k factor means less heat is being conducted through the non-combustible material to the combustible material beneath it. The k value of a material must be equal or smaller then the required k value to be acceptable.

$$\frac{\text{(BTU) (inch)}}{\text{(foot}^2 \text{ (hour) (}^\circ\text{F)}}$$

### Thermal Resistance: R value

The R value is a measure of a material's resistance to heat transfer. R value is convenient when more than one material is used since you can add the R values together, whereas you can not do this for k value. The HIGHER the R factor means less heat is being conducted through the non-combustible material to the combustible material beneath it. The R value of a material must be equal or larger then the required R value to be acceptable.

### Converting k to R:

Divide 1 by k and multiply the results times the thickness in inches of the material.

$$R = 1/k \times \text{inches of thickness}$$

### Converting R to k:

Divide the inches of thickness by R.

$$k = \text{inches of thickness}/R$$

### Calculatons:

Example: Floor protection requires k value of 0.84 and 3/4 inch thick.

Alternative material has a k value of 0.6 and is 3/4 inch thick.

Divide 0.6 by .75 = k value of 0.80. This k value is smaller than 0.84 and therefore is acceptable.

Hearth Extension Insulation Alternatives, R Value = 1.16			
Material	k per inch thick	R per inch thick	Minimum thickness required
Hearth & Home HX3, HX4	0.43	2.33	1/2 in.
USG Micore 300™	0.46	2.18	1/2 in.
USG Durock™ Cement Board	1.92	0.52	2-1/4 in.
Cement Mortar	5.0	0.20	5-7/8 in.
Common Brick	5.0	0.20	5-7/8 in.
Ceramic Tile	12.50	0.08	14-5/8 in.
Marble	14.3-20.0	0.07-0.05	16-5/8 in. - 23-3/8 in.

Table 4.1

## C. Hearth Extension

If the hearth extension is lower than the fireplace opening, the portion of the insert extending onto the hearth must be supported. Manufacturer designed adjustable support kit can be ordered from your dealer. (See page 22).

## D. Outside Air Installation

**NOTE:** If your home is fairly airtight, it is recommend that you install the outside air that comes standard with the appliance. If you are installing into a Mobile Home, outside air is required. The fireplace must have an outside air supply coming into it in order for the insert outside air kit to be used.

**The grille assembly must be removed before you can install the outside air. If you plan on moving the blower cord to the left side of the appliance, do it now while the grille is removed to save you time. See page 12 for detailed instructions.**

1. Remove the 2 air control spring handles. **Figure 11.1.** Remove the grille by removing 2 screws in the center of the grille. **Figure 11.2**
3. Unplug the snap disc by-pass switch and speed control from the wiring harness. **Figure 11.2**
4. Remove cover from rear of insert by removing 2 screws. **Figure 11.1**
5. Attach the cover to the front of the insert to block room air from entering through the front grille. **Figure 11.2.**
6. Re-connect snap disc & speed control to wiring harness.
7. Re-install grille and spring handles in reverse order.

### CAUTION

Risk of Smoke Spillage

Outside air inlet must be located to prevent blockage from:

- Leaves
- Snow or ice
- Other debris
- Blockage may cause combustion air starvation
- Smoke spillage may set off smoke alarms

### WARNING



Asphyxiation and Fire Risk

Do not draw outside combustion air from:

- Wall, floor or ceiling cavity
- Enclosed space such as an attic or garage
- Close proximity to exhaust vents or chimneys
- Fumes or odor may result.

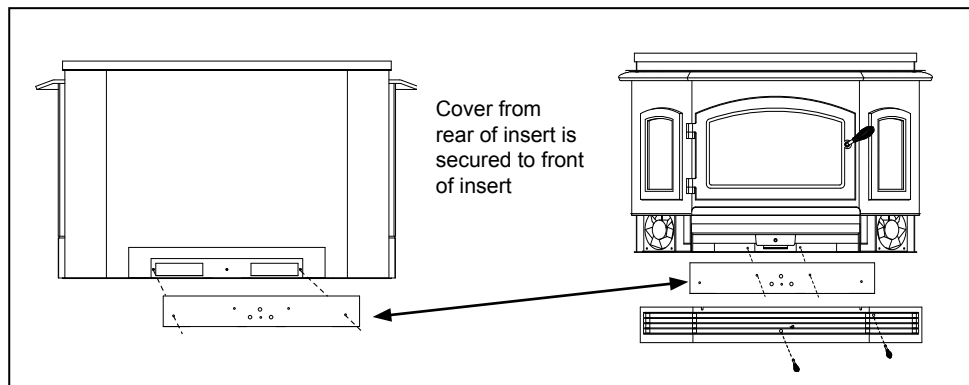


Figure 11.1

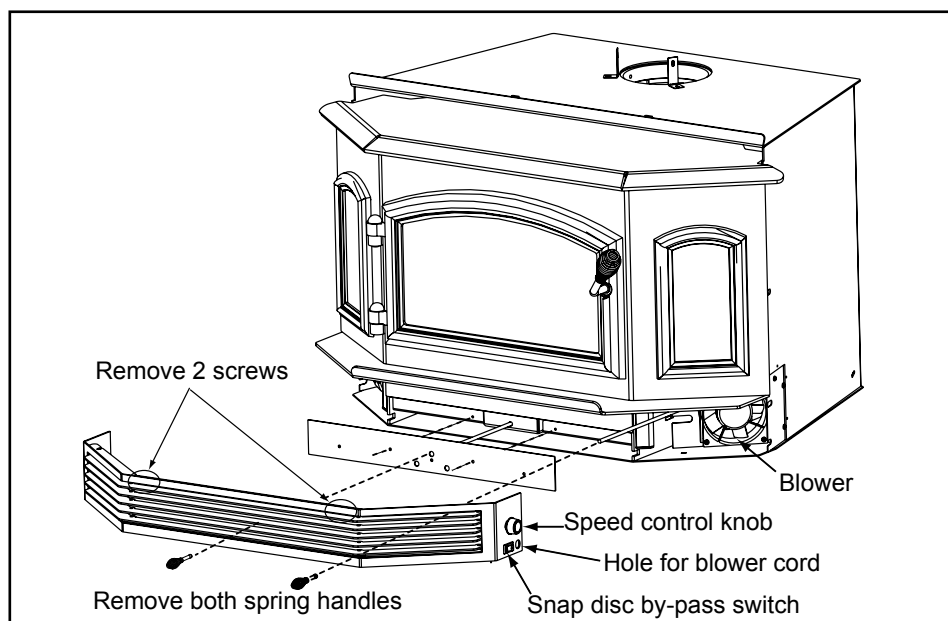
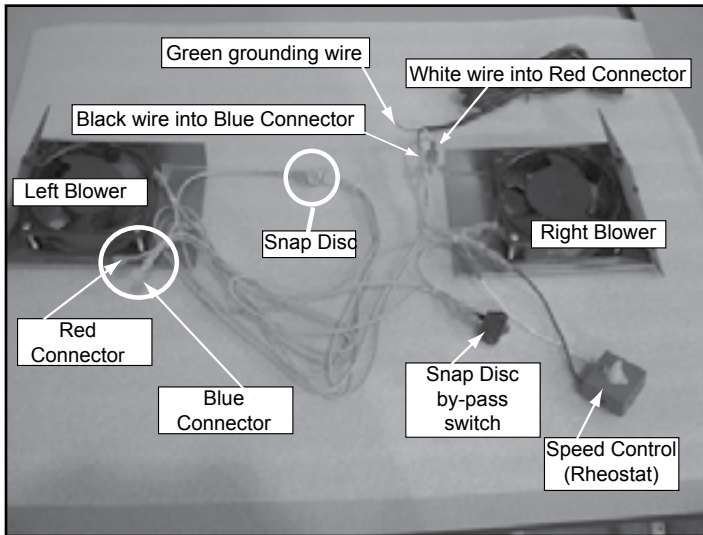


Figure 11.2

**E. Blower Cord Location**

The 5100-I Insert comes standard with 2 blowers, installed at the factory with the power cord on right side of insert (as you face the unit). Do not route the power cord under or in front of appliance.

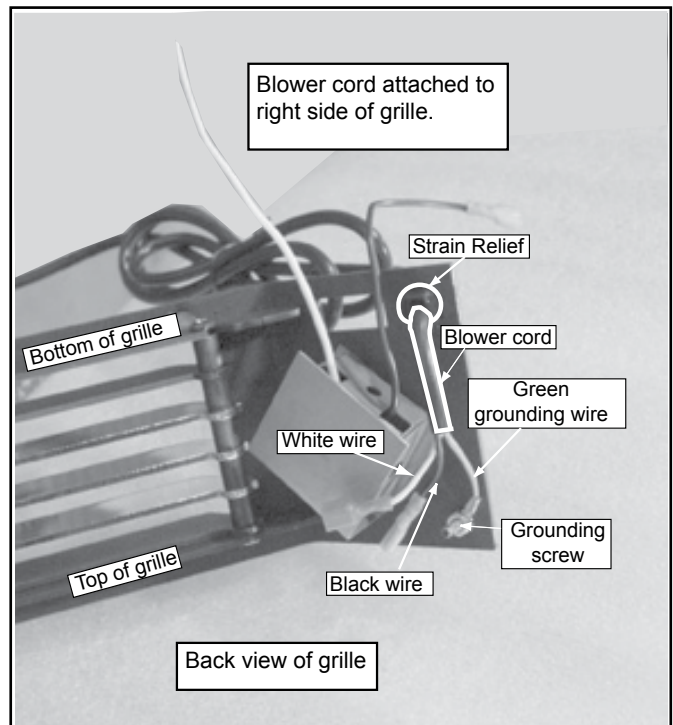
The power cord can also be installed on the left side. Follow instructions below.



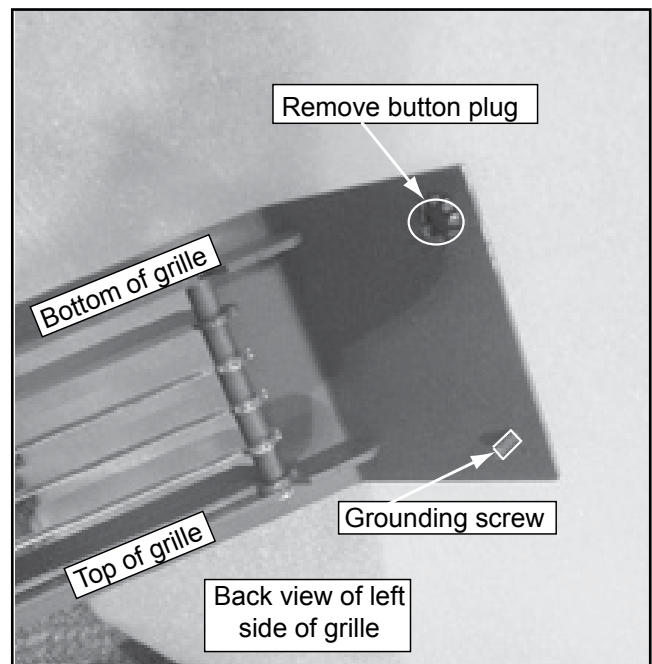
**Figure 12.1 - Blower Assembly Components**

1. **Disconnect the appliance from power supply.**
2. Remove the grille following instructions on **page 11**.
3. Unplug the blower cord wires from the wire harness.
4. Remove green grounding wire from grounding screw.
5. Using a pair of pliers, squeeze the strain relief and remove the blower cord wires and strain relief from the grille.
6. Locate the wire harness wires tucked up under the ash-catcher on the left side of the appliance. Cut the zip tie that is holding the wires in place.
7. Remove the button plug from the left side of grille. Thread the blower cords wires through the hole and snap the strain relief in place. **Figure 12.3.**
8. Attach grounding wire to ground screw.
9. Connect the white blower cord wire to the red connector on the wire harness.
10. Connect the black blower cord wire to the blue connector on the wire harness.
11. Tuck the wire out of the way of the blower motor.
12. Re-install grille.



**NOTE: Each wire has a label to denote which component it connects to.**



**Figure 12.2**



**Figure 12.3**

	<p><b>CAUTION</b></p>
	<p>Shock hazard.</p> <ul style="list-style-type: none"> <li>• Do NOT remove grounding prong from plug.</li> <li>• Plug directly into properly grounded 3 prong receptacle.</li> <li>• Route cord away from appliance.</li> <li>• Do NOT route cord under or in front of appliance.</li> </ul>

F. Wiring Diagram

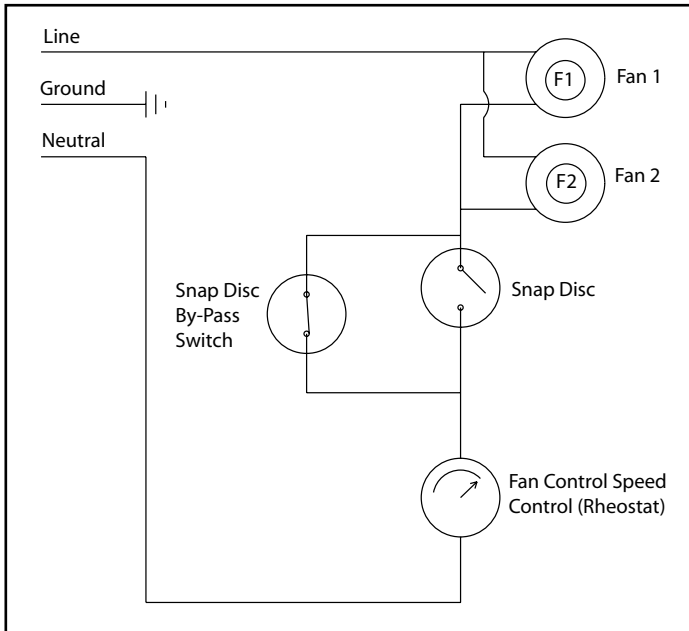


Figure 13.1

G. Optional Offset Adapter

Determine offset needed and adjust adapter accordingly however, DO NOT OVER EXTEND ADAPTER. Follow the detailed instructions that are supplied with the offset adapter.

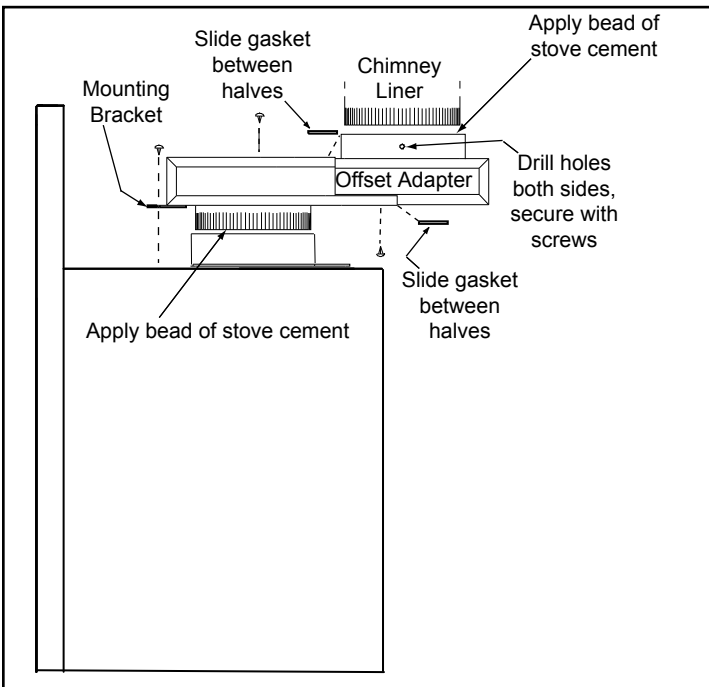


Figure 13.2

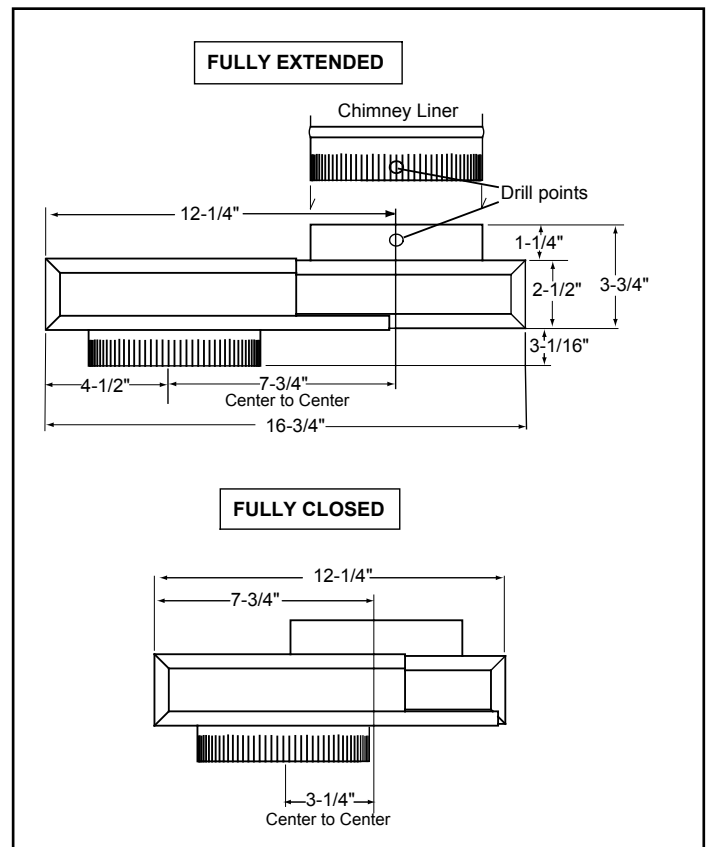


Figure 13.3

# 5 Chimney Requirements

## A. Venting Components

### Chimney Connector:

It is also known as flue pipe or stove pipe. It must be 6 inches (152mm) minimum diameter stainless steel connector pipe.

### Chimney:

The chimney can be new or existing, masonry or prefabricated and must meet the following minimum requirements as specified in Section 5B below.

## B. Chimney Systems

### Prefabricated Metal Chimney

- Must be a 6 inch (152mm) inside diameter of high temperature chimney listed to UL 103 HT (2100°F) or ULC S628.
- Must use components required by the manufacturer for installation.
- Must maintain clearances required by the manufacturer for installation.
- Refer to manufacturers instructions for installation

**NOTE:**

In Canada, installations into factory-built zero clearance fireplaces are **NOT** allowed.

### Approved Masonry Chimney:

- Must meet minimum standards of NFPA 211.
- Must have at least 5/8" (16mm) fireclay lining joined with refractory cement. (Installations into a clay flue without a stainless steel liner may reduce draw which affects performance, will cause the glass to darken and produce excessive creosote).
- Cross-sectional area should be no more than 3 times the cross-sectional area of the flue collar of the insert. (28 sq inch flue area x 3 inches = 84 square inches maximum chimney area).
- Should be lined with a 6 inch (152mm) stainless steel flue liner to improve performance and reduce creosote build-up.
- No dilution air is allowed to enter the chimney.
  1. Seal damper area of chimney around chimney connector, or seal insert against the face of the fireplace.
  2. Both methods must be removable and replaceable for cleaning and re-installation.
- When possible, install an airtight clean-out door to the rear of the smoke shelf.

## Inspections

Existing chimneys should be inspected and cleaned by a qualified professional prior to installation. The chimney must not have cracks, loose mortar or other signs of deterioration and blockage. Hearth & Home recommends a NFI or CSIA certified professional or a technician, under the direction of a certified professional, conduct a Level II inspection per NFPA 211.


### Larger Chimneys

It is recommended that chimneys with larger diameters than 6 inches (152mm) be relined. An oversized flue can affect draft and impair performance and will allow increased build-up of creosote.


### Chimney Height / Rise and Run

This product was designed for and tested on a 6 inch (152mm) chimney, 14 to 16 feet (428-488cm) high, measured from the base of the appliance. The further your stack height or diameter varies from this configuration, the possibility of performance problems exists.

Chimney height may need to be increased by 2 - 3% per each 1000 feet above sea level. It is not recommended to use offsets or elbows at altitudes above 4000 feet above sea level or when there are other factors that affect flue draft.



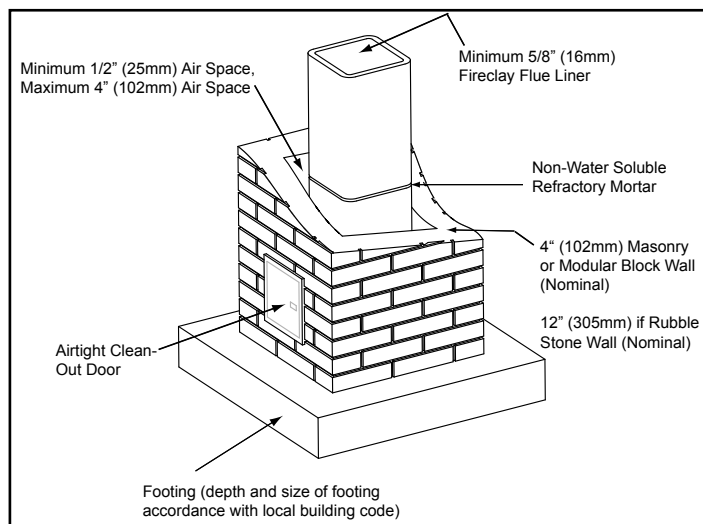
## WARNING



**Fire Hazard**

Inspection of Chimney:

- Chimney must be in good condition.
- Meets minimum standard of NFPA 211
- Factory-built chimney must be 6" (152mm) UL103 HT.



**Figure 14.1**

### C. Installing Chimney Components

**REQUIRED:** A minimum NFPA 211 required stainless steel liner connector pipe extending to the first flue liner of the existing code approved masonry chimney. To eliminate dilution air in the chimney, seal the damper area of the chimney around the chimney connector.

**BEST:** A complete relining of the chimney system with a 6 inch (152mm) diameter listed, stainless steel liner. The liner must be connected to the insert flue collar and extend the entire height of the chimney, terminating slightly above a plate that seals the top of the chimney. All joints should be secured with 3 sheet metal screws. The sections must be attached to the insert and to each other with the crimped (male) end pointing toward the insert. **Figure 15.1.**

Minimum clearances to combustibles must be maintained.

A full reline is required for factory-built fireplace installations in Canada and is highly recommended in USA.

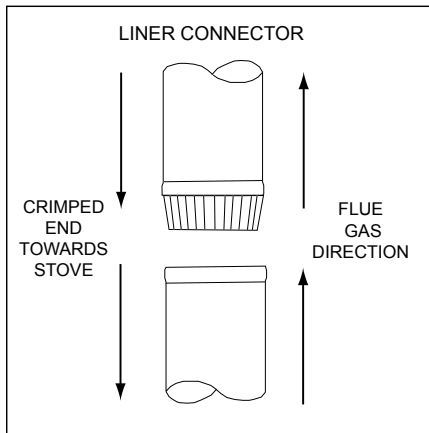


Figure 15.1

#### Ovalizing Round Stainless Steel Liners

Ovalizing round stainless steel liners to accommodate the liner passing through the damper region of a fireplace is an allowable and acceptable practice.

Ensure that the ovalization is minimized to the extent required to fit through the damper.

**WARNING**

**Fire Risk.**  
 Do NOT pack insulation or other combustibles between spacers.

- ALWAYS maintain specified clearances around venting and spacers.
- Install spacers as specified.

Failure to keep insulation or other material away from vent pipe may cause fire.

#### Air Clearances

To ensure that insulation or any other combustible material does not contact the chimney, a chimney inside the house must have at least 2 inches (51mm) of air space clearance around the chimney. A chimney outside the house must have at least 1 inch (25mm) clearance to the combustible structure. Noncombustible fire stops must be installed at the spaces where the chimney passes through floors and/or ceilings. **Figures 15.2 and 15.3.**

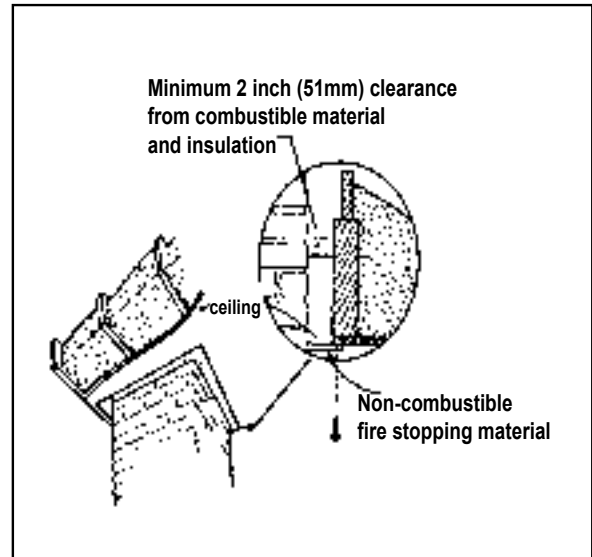


Figure 15.2

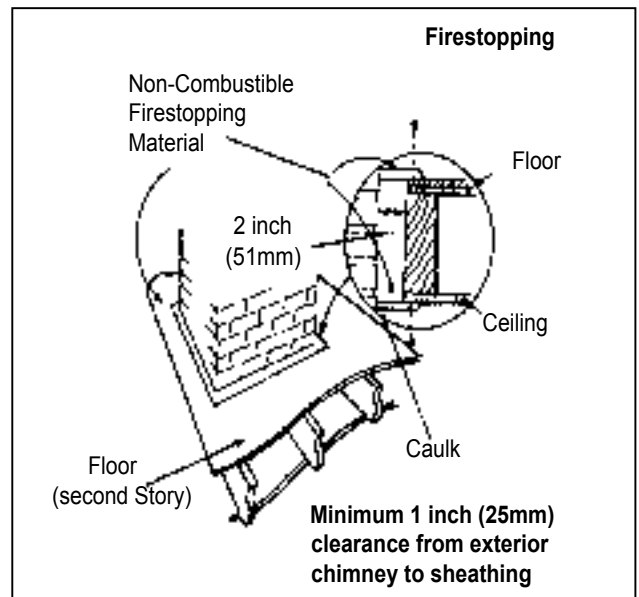


Figure 15.3

**D. Chimney Termination Requirements**

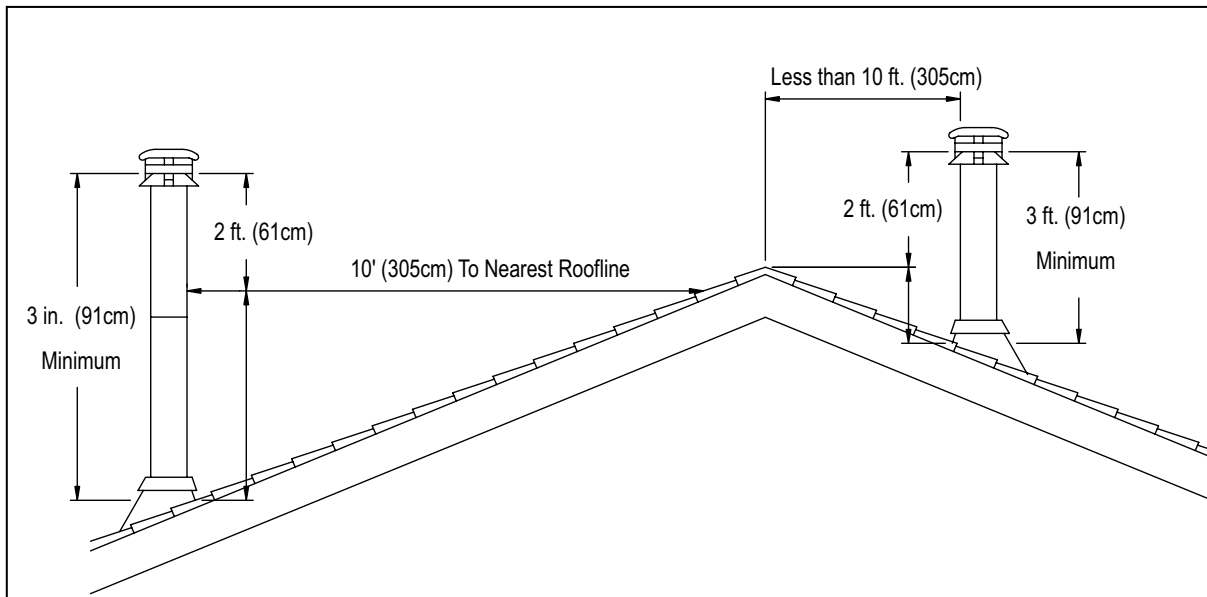
Follow manufacturers instructions for clearances, securing, flashing and terminating the chimney.

- Must have an approved and listed cap
- Must not be located where it will become plugged by snow or other material
- Must terminate at least 3 feet (91cm) above the roof **and** at least 2 feet (61cm) above any portion of the roof within 10 feet (305cm).
- Must be located away from trees or other structures

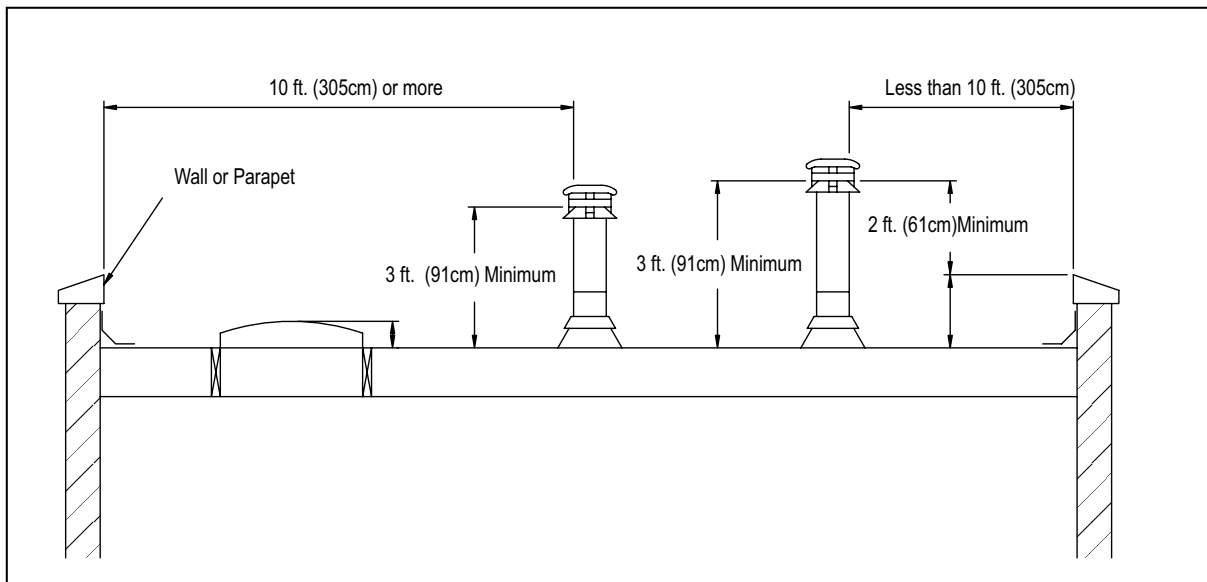
**NOTE:**

- Chimney performance may vary.
- Trees, buildings, roof lines and wind conditions affect performance.
- Chimney height may need adjustment if smoking or overdraft occurs.

**E. 2-10-3 Rule** These are safety requirements and are not meant to assure proper flue draft



**Figure 16.1** Pitched Roof



**Figure 16.2** Flat Roof



**F. Masonry Fireplace**

The Quadra-Fire 5100-I Insert conforms with the UL 1482 and ULC S628 (Canada) in all respects, and is approved to UL & ULC safety standards for installation and use within a fireplace with a masonry chimney in accordance with NFPA 211.

In the USA all masonry fireplace installations require a stainless steel liner connector pipe extending to the first flue liner of the existing code approved masonry chimney. In Canada, a full reline is required.

**NOTE:** Installation into fireplaces without a permit will void the listing.

**NOTE:** In Canada, the chimney liner must conform to the Class 3 requirements of CAN/ULC-S635, Standard for Lining Systems for Existing Masonry or Factory-Built Chimneys and Vents, or CAN/ULC-S640, Standard for Lining Systems for New Masonry Chimneys.

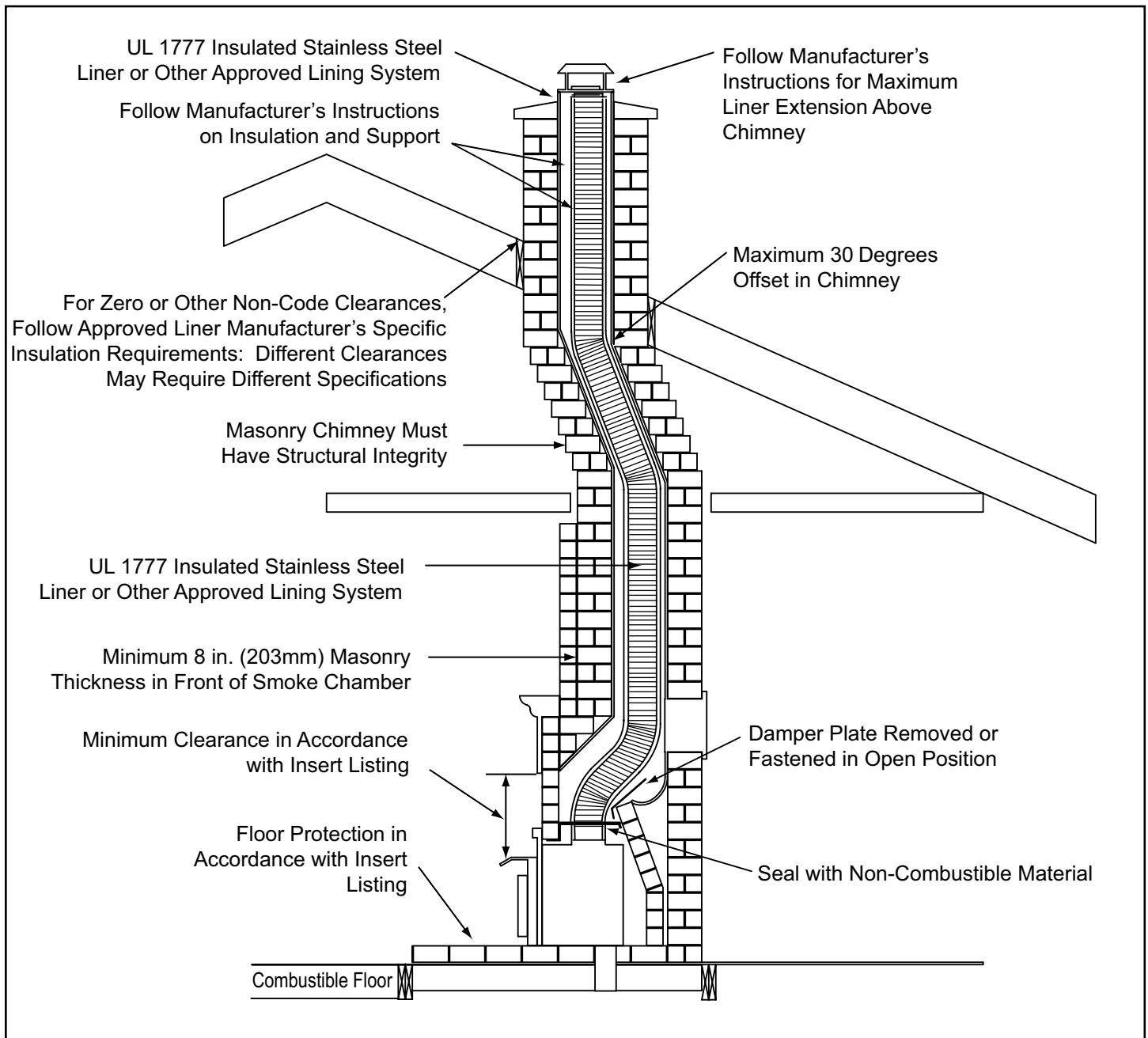


Figure 17.1

**G. Factory-Built Zero Clearance Fireplace  
(USA INSTALLATIONS ONLY)**

The Quadra-Fire 5100-I Insert is listed to UL 1482 Standard and is approved for installation into listed factory-built zero clearance fireplaces listed to UL 127 conforming to the following specifications and instructions:

The original factory-built clearance fireplace chimney cap must be re-installed after installing the approved chimney liner meeting type H.T. requirements (2100°F) per UL 1777. The air flow of the factory-built zero-clearance fireplace system must not be altered. The flue liner top support attachment must not reduce the air flow for the existing air-cooled chimney system.

**NOTE: Refer to chimney liner manufacturer for recommendations on supporting the liner.**

Minimum Width of cavity opening:	36 in.
Minimum Height:	24 in.
Minimum Depth from front to rear:	19 in.

The factory-built chimney must be listed per UL127 and meet the type HT requirements of UL103. Factory-built fireplace chimneys tested to UL127-1998, may be at the fireplace manufacturer's option, tested to the same criteria as UL103 HT requirements. If the chimney is not listed as meeting HT requirements, or if the factory-built fireplace was tested prior to 1998, a full height listed chimney liner must be installed from the appliance flue collar to the chimney top. The liner must meet type HT requirements (2100°F) per UL 1777.

The liner must be securely attached to the insert flue collar and the chimney top. To prevent room air passage to the chimney cavity of the fireplace, seal either the damper area around the chimney liner with high temperature sealant or the fireplace front with fiberglass batting. Circulating air chambers (i.e. in a steel fireplace liner or metal heat circulator) may not be blocked.


The fireplace must not be altered, except that the damper may be removed to accommodate a direct-connect starter pipe or chimney liner, and external trim pieces which do not affect the operation of the fireplace may be removed providing they can be stored on or within the fireplace for reassembly if the insert is removed.


The following modifications of factory-built fireplaces are permissible:

- removal of damper
- removal of smoke shelf or baffle
- removal of ember catches
- removal of fire grate
- removal of viewing screen/curtain
- removal of doors.

The permanent metal warning label provided must be attached to the back of the fireplace, with screws or nails, stating that the fireplace may have been altered to accommodate the insert, and must be returned to original condition for use as a conventional fireplace.

Final approval of this installation type is contingent upon the authority having jurisdiction.

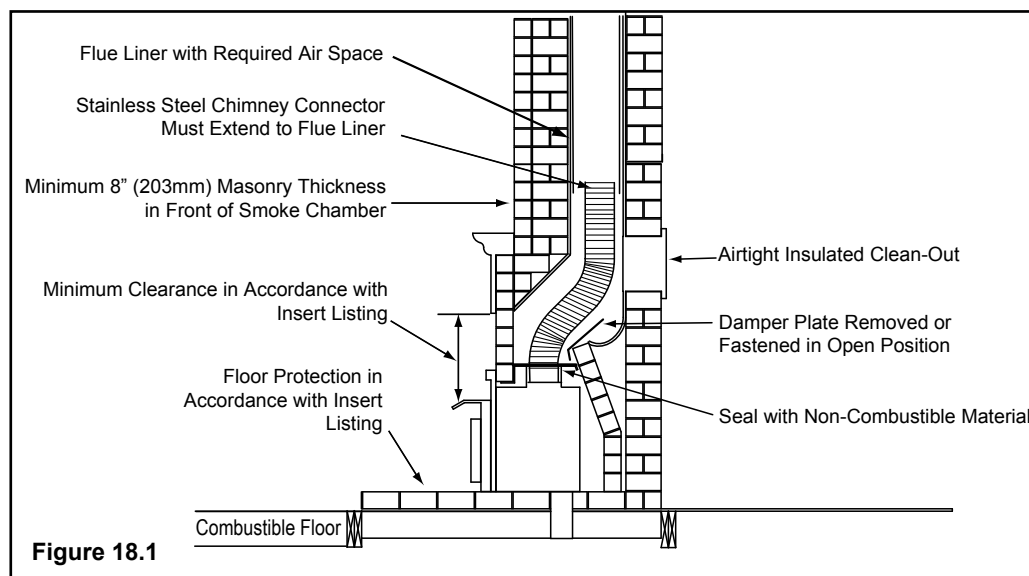

WARNING



**Fire Risk.**

When lining air-cooled factory-built chimneys:

- Run chimney liner approved to UL 1777 Type HT requirements (2100 degrees F)
- Re-install original factory built chimney cap ONLY
- DO NOT block cooling air openings in chimney
- Blocking cooling air will overheat the chimney



**Figure 18.1**

# 6 Mobile Home Installation

1. An outside air inlet must be provided for combustion. See **page 11** for detailed information.
2. Appliance must be secured to the mobile home structure. Drill a hole on each side of the insert into the outer skin and into the floor. Use plumbers tape to secure to structure (washers may be required).
3. Appliance must be grounded with #8 solid copper grounding wire or equivalent and terminated at each end with N.E.C. approved grounding device.
4. The factory-built fireplace must meet (UM)84-HUD requirements for outside combustion air supply to the fireplace fire chamber and the chimney must be listed to UL103 HT or a listed UL 1777 full length 6 inch (152mm) diameter liner must be used. It must be equipped with a spark arrester cap and the outside air must be installed on the insert.
5. In Canada, this appliance must be connected to a 6 inch (152mm) factory-built chimney conforming to CAN/ULC-S610, STANDARD FOR FACTORY BUILT CHIMNEYS.
6. Follow the chimney and chimney connector manufacturer's instructions when installing the flue system for use in a mobile home.
7. Maintain clearance to combustibles.
8. Floor protection requirements must be followed precisely.
9. Use silicone to create an effective vapor barrier at the location where the chimney or other component penetrates to the exterior of the structure.
10. Burn wood only. Other types of fuels may generate poisonous gases (e.g., carbon monoxide).
11. If unit burns poorly while an exhaust blower is on in home, (i.e., range hood), increase combustion air.

**NOTE:** Top sections of chimney must be removable to allow maximum clearance of 13.5 feet (411cm) from ground level for transportation purposes.

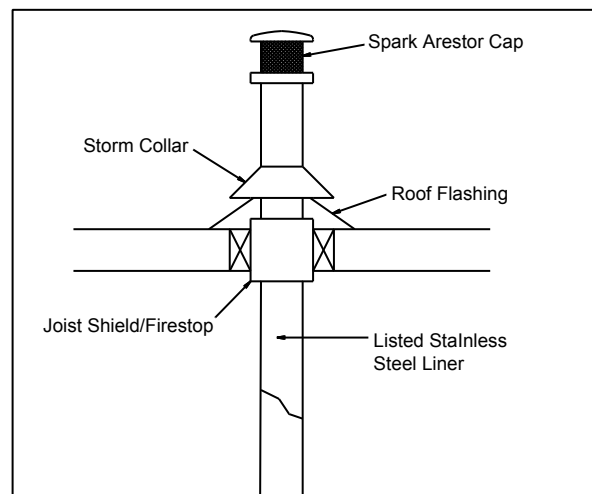


Figure 19.1

## CAUTION

Maintain structural integrity of mobile home:

- Floor, wall, ceiling and/or roof.

Do NOT cut through:

- Floor joist, wall, studs or ceiling trusses.
- Any supporting material that would affect the structural integrity.



## WARNING



Asphyxiation Risk.

Never install in a sleeping room.

Consumes oxygen in the room

# 7 Appliance Set-up

## A. Installation Outline

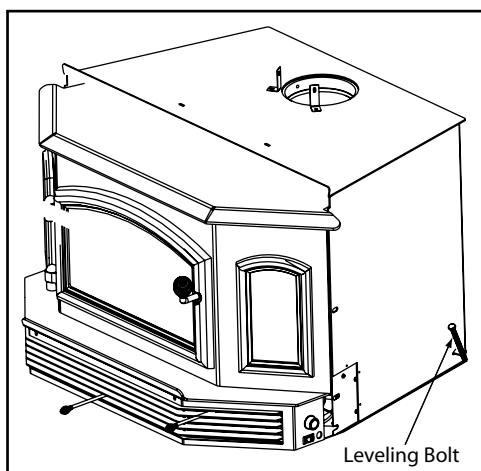
1. Record serial number on back cover of manual.
2. Remove the leveling bolts from the component pack and start the bolts in the weld nuts. **Figure 20.1**
3. Position insert on hearth with rear of insert extending into fireplace opening. Slide insert on its base into the opening leaving approximately 4 inches (102mm) protruding out the front.
4. Assemble the panels and temporarily attach to insert. Push insert into opening leaving 1 inch (25mm) protruding out the front. Confirm the panel size is correct for the opening and that the face can be sealed off from room air when installation is complete. **Figure 20.2 & 20.3.**
5. Remove the panels and secure liner to the chimney ring.
6. Level the insert in its final position in the fireplace. If an offset adapter is required for installation, install it first and then secure liner to offset adapter.
7. Install the Panel & Trim set and (if applicable) the Zero Clearance Trim Support.

## B. Leveling Bolts

Two leveling bolts, 3/8" x 4" are shipped inside the component pack found inside the firebox.

**NOTE:** Not all installations will require the use of the leveling bolts.

1. Remove the bolts from the component pack and insert into weld nuts welded to each side of the insert bottom **Figure 20.1**
2. After securing the liner to the flue collar (or offset adapter) and the insert is in its final position, extend bolts downward to level insert.



**Figure 20.1**

## C. Panel & Trim Set Installation

Standard Size: 30-1/2" h x 47" w

Large Size: 34-1/4" h x 51-1/4" w

### Kit Includes:

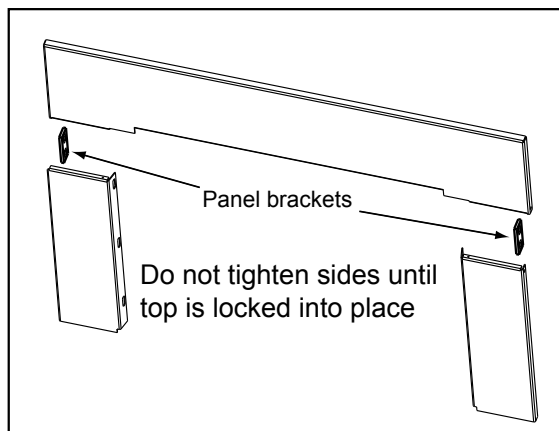
- (2) Side panels, left & right
- (1) Panel top & fastener package
- (2) Side trim, left & right
- (1) Trim top & fastener package.

### Tools Needed:

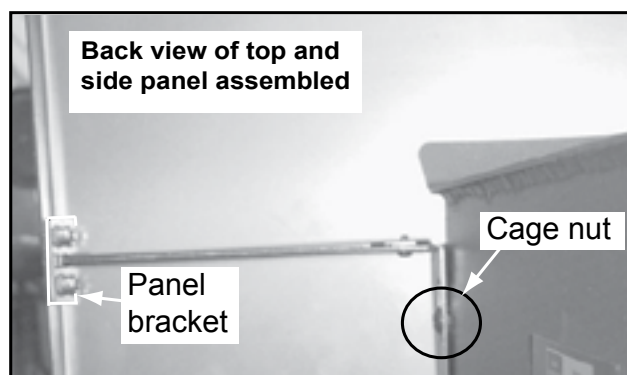
- Screwdrivers:
- Powered Phillips head
  - Long-handled Phillips head

### 1. Attaching Panels to the Insert

- a. Loosely install the 2 side panels, do not tighten, using the cage nuts already attached to the appliance. (Note: The sides are not interchangeable). **Figure 20.3.**
- b. Put top panel in place pushing straight back and then to the right to lock onto top of side panels. Attach the top panel to the sides using the panel brackets included in the fasteners package. **Figure 20.2**
- c. Tighten side panels to the appliance using a long-handle screw driver.



**Figure 20.2**



**Figure 20.3**

## 2. Assembling Trim

- Place protective covering on surface to be used to assemble the trim pieces. Lay the trim face down.
- Attach the 2 side trim pieces to the top trim at each corner using the "L" bracket included in fasteners package. Slide assembled trim over panel set.

### Figure 21.1.

**NOTE:** If you have a mantel, you may need to install the trim on your panels before you push the insert into the fireplace opening. If not, you can slide the trim over the panel set after the insert is in its final position.

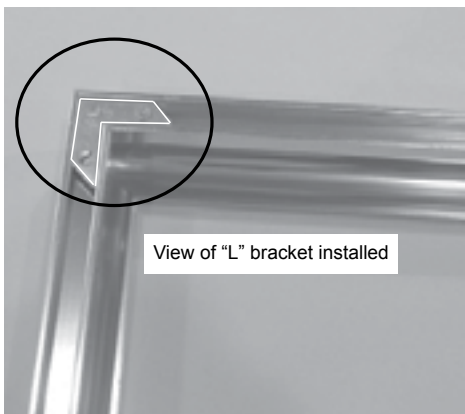


Figure 21.1

## D. Securing Liner to Flue Collar

There are two options to secure the liner to the chimney ring:

**Option One:** If there is enough room on the top of the insert to work, hand bend the 2 tabs upward 90°. Secure the liner with the supplied hex head bolts 1/4-20-3/4.

**Option Two:** Remove the manifold tubes, fiberboard baffle and ceramic blanket. From inside the firebox, pull liner down through the chimney ring below the outer skin. There are 2 pre-drilled holes in the chimney ring 180° apart. Secure the liner with the supplied hex head bolts 1/4-20-3/4. **See Figures 32.3 and 32.4 on page 32** for details for removing the manifold tubes, baffle and ceramic blanket.

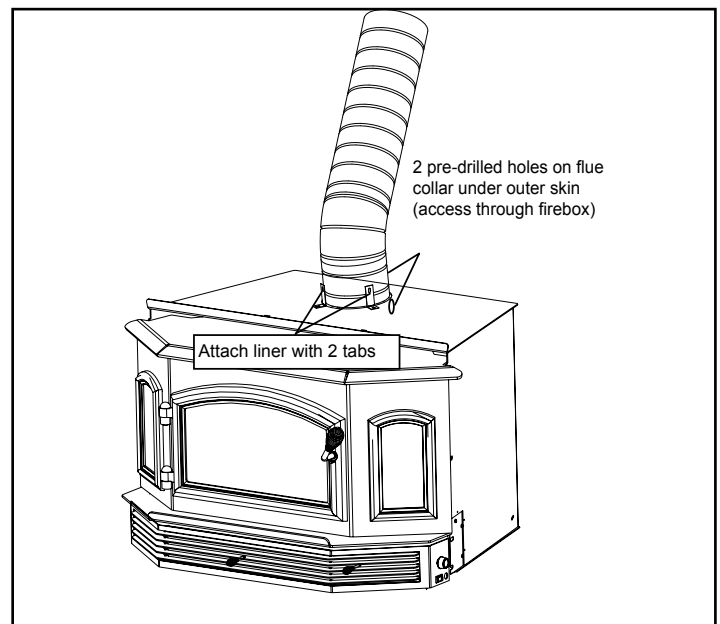


Figure 22.2

**NOTE:** Tabs are shipped from factory in a flat position. Bend upwards 90 degrees as show in **Figure 22.2**

**E. Zero Clearance Adjustable Trim Support**

**Size: 12" d x 50" w, 2-10" h**

**Included in Kit:**

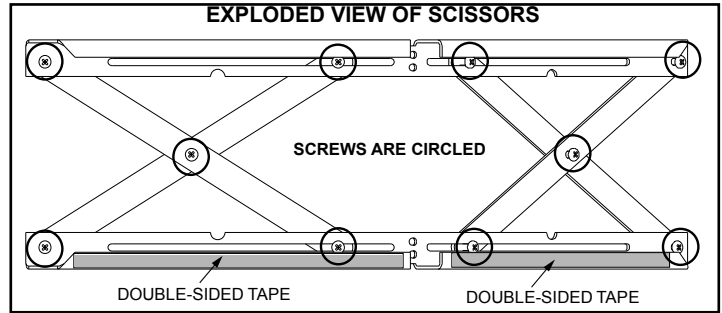
- (1) Trim top
- (1) Trim front
- (2) Trim sides
- Double-sided tape (already installed)

**Tools Needed:**

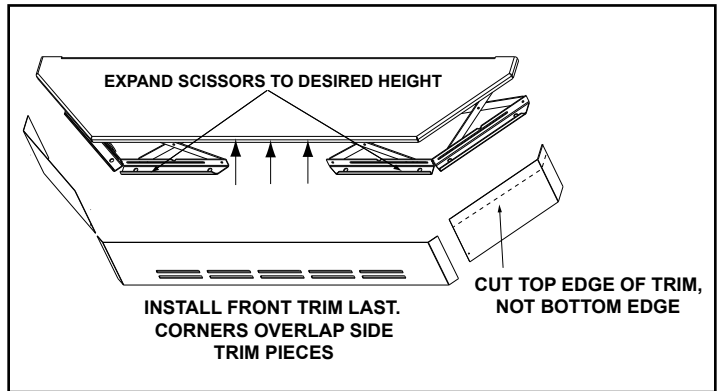
- Phillips head screwdriver
- Sheet metal shears
- Measuring tape
- Gloves

1. The 10 screws on each set of scissors will already be loose when shipped. **Figure 22.1.**
2. Expand scissors to desired height. Tighten screws to hold in place using Phillips Head screwdriver. **Figure 22.2.**
3. Measure front and side trims to required height to cover scissors and mark pieces for cutting. Cut excess material from **top** of trim's edge, not bottom. This edge will be sharp; wear gloves to prevent injury to your hands. **Figure 22.2.**
4. Using sheet metal shears, cut trim along the marked edge. The cut edge fits under lip of top trim, so it allows for some variance in your straight edge.
5. The double-sided tape that holds front and side trims to scissors has a particularly powerful bonding adhesive. Adjustments are extremely difficult once trim has adhered to tape. Do a dry run first without removing paper from tape.
6. Place cut edge of trim under top lip and into position on scissors. Place side pieces on first and then front piece. The front piece overlaps side pieces.
7. Once you are satisfied with the positioning, remove trim and set aside.
8. Remove the paper from double-sided tape that is to accept trim side. Align side and then press hard against tape to secure side piece. Repeat for other side. Install front trim piece last.

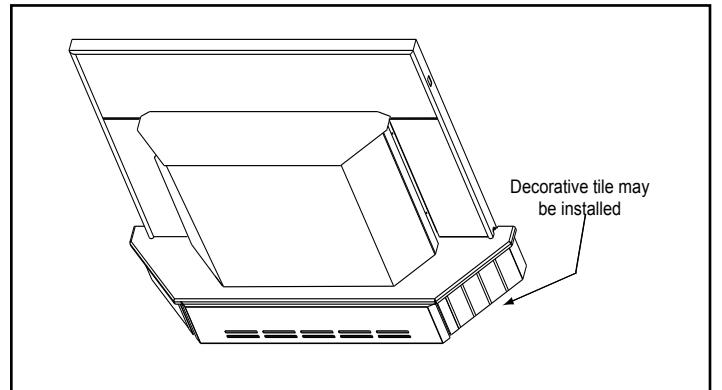
**NOTE:** 3/8 inch (9.5mm) thick tile or like material can be cut to size and fit under lip of top trim edge for a decorative touch. **Figure 22.3.**



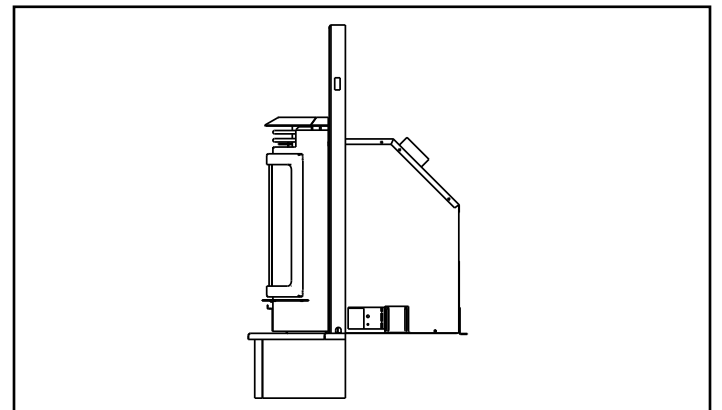
**Figure 22.1**



**Figure 22.2**



**Figure 22.3**



**Figure 22.4**



**CAUTION**

Sharp Edges

- Wear protective gloves during installation.

# 8 Operating Instructions

## A. Over-Firing Your Appliance

	<b>WARNING</b>
	<p><b>Fire Risk</b></p> <p>Do not over-fire.</p> <p>Over-firing may ignite creosote or will damage the stove and chimney.</p> <p>To prevent over-firing your stove, DO NOT:</p> <ul style="list-style-type: none"> <li>• Use flammable liquids</li> <li>• Overload with wood</li> <li>• Burn trash or large amounts of scrap lumber</li> <li>• Permit too much air to the fire</li> </ul>

### 1. Symptoms of Over-Firing

Symptoms of over-firing may include one or more of the following:

- Chimney connector or appliance glowing
- Roaring, rumbling noises
- Loud cracking or banging sounds
- Metal warping
- Chimney fire

### 2. What To Do if Your Stove is Over-Firing

- Immediately close the door and air controls to reduce air supply to the fire.
- If you suspect a chimney fire, call the fire department and evacuate your house.
- Contact your local chimney professional and have your stove and stove pipe inspected for any damage.
- Do not use your stove until the chimney professional informs you it is safe to do so.

Hearth & Home Technologies WILL NOT warranty stoves that exhibit evidence of over-firing. Evidence of over-firing includes, but is not limited to:

- Warped air tube
- Deteriorated refractory brick retainers
- Deteriorated baffle and other interior components

## B. Wood Selection & Storage

Burn only dry seasoned wood. Store wood under cover, out of the rain and snow. Dry and well-seasoned wood will not only minimize the chance of creosote formation, but will give you the most efficient fire. Even dry wood contains at least 15% moisture by weight, and should be burned hot enough to keep the chimney hot for as long as it takes to dry the wood out - about one hour. It is a waste of energy to burn unseasoned wood of any kind.

Dead wood lying on the forest floor should be considered wet, and requires full seasoning time. Standing dead wood can be considered to be about 2/3 seasoned. To tell if wood is dry enough to burn, check the ends of the logs. If there are cracks radiating in all directions from the center, it is dry. If your wood sizzles in the fire, even though the surface is dry, it may not be fully cured.

Splitting wood before it is stored reduces drying time. Wood should be stacked so that both ends of each piece are exposed to air, since more drying occurs through the cut ends than the sides. This is true even with wood that has been split. Store wood under cover, such as in a shed, or covered with a tarp, plastic, tar paper, sheets of scrap plywood, etc., as uncovered wood can absorb water from rain or snow, delaying the seasoning process.

## C. Burning Process

In recent years there has been an increasing concern about air quality. Much of the blame for poor air quality has been placed on the burning of wood for home heating. In order to improve the situation, we at Quadra-Fire have developed cleaner-burning woodstoves and inserts that surpass the requirements for emissions established by our governing agencies. These appliances must be properly operated in order to insure that they perform the way they are designed to perform. Improper operation can turn most any woodstove or insert into a smoldering environmental hazard.

### 1. Kindling or First Stage

It helps to know a little about the actual process of burning in order to understand what goes on inside a woodburning appliance. The first stage of burning is called the kindling stage. In this stage, the wood is heated to a temperature high enough to evaporate the moisture which is present in all wood. The wood will reach the boiling point of water (212°F) and will not get any hotter until the water is evaporated. This process takes heat from the coals and tends to cool the appliance.

Fire requires three things to burn - fuel, air and heat. So, if heat is robbed from the appliance during the drying stage, the new load of wood has reduced the chances for a good clean

burn. For this reason, it is always best to burn dry, seasoned firewood. When the wood isn't dry, you must open the air controls and burn at a high burn setting for a longer time to start it burning. The heat generated from the fire should be warming your home and establishing the flue draft, not evaporating the moisture out of wet, unseasoned wood, resulting in wasted heat.

The air control in the right side of the grille is called the Start-Up Air Control; it is used during the kindling stage of burning. It must be closed (pulled out) after the first 5 to 15 minutes.

**2. Second Stage**

The next stage of burning, the secondary stage, is the period when the wood gives off flammable gases which burn above the fuel with bright flames. During this stage of burning it is very important that the flames be maintained and not allowed to go out. This will ensure the cleanest possible fire. If you are adjusting for a low burn rate, you should close down the air to the point where you can still maintain some flame. If the flames tend to go out, it is set too low for your burning conditions. The air control, located in the center of the grille is the one used to adjust for burn rates. This is called the Primary Air Control. **Figure 24.1.**

**3. Final Stage**

The final stage of burning is the charcoal stage. This occurs when the flammable gases have been mostly burned and only charcoal remains. This is a naturally clean portion of the burn. The coals burn with hot blue flames.

It is very important to reload your appliance while enough lively hot coals remain in order to provide the amount of heat needed to dry and rekindle the next load of wood. It is best to open the air controls for a short while **before reloading**. This livens up the coalbed. Open door slowly so that ash or smoke does not exit appliance through opening. You should also break up any large chunks and distribute the coals so that the new wood is laid on hot coals.

Air quality is important to all of us, and if we choose to use wood to heat our homes we should do so responsibly. To do this we need to learn to burn our stoves in the cleanest way possible. Doing this will allow us to continue using our wood stoves for many years to come.

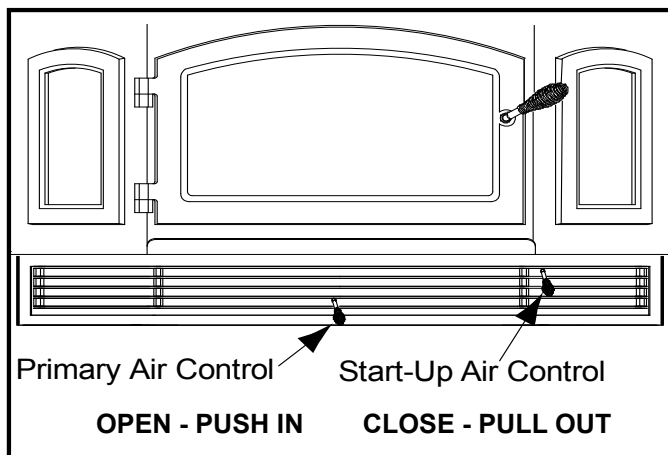
**D. Air Controls**

**1. Start-Up System**


The combustion air enters at the rear of the firebox through the rear air tubes. This air supply is controlled by the Start-up Air Control.

**2. Primary Air System**

The primary air enters at the upper front of the firebox, near the top of the glass door. This preheated air supplies the necessary fresh oxygen to mix with the unburned gases, helping to create second, third and fourth combustions. This air is regulated by the Primary Air Control. For more primary air push control in, for less air pull control out.




**Figure 24.1**

 **WARNING**

**Fire Hazard.**  
Keep combustible materials, gasoline and other flammable vapors and liquids clear of appliance.

- Do NOT store flammable materials in the appliance's vicinity.
- Do NOT use gasoline, lantern fuel, kerosene, charcoal lighter fluid or similar liquids to start or "freshen up" a fire in this heater.
- Keep all such liquids well away from the heater while it is in use.
- Combustible materials may ignite.

 **WARNING**

**Fire Hazard.**

- Do NOT operate with Start-Up Air Control in open position in excess of 15 minutes.
- Risk of extreme temperatures!

Prolonged operation with Start-Up Air Control in open position may cause combustible materials around appliance to exceed safe temperature limits.

**NOTE:**

- Operate appliance on High Burn 15 minutes a day to keep air passages clean.



## E. Heat Output

BTU / Hr	Start-Up Air Control	*Primary Control
Below 10,000	Closed after 5 to 15 minutes	Pull to Stop
10,000 - 15,000	Closed after 5 to 15 minutes	3/4" - 1" open
15,000 - 30,000	Closed after 5 to 15 minutes	1" - 2-1/2" open
Maximum Heat	Closed after 5 to 15 minutes	Fully open

**\*NOTE:** These are approximate settings, and will vary with type of wood or chimney draft. Due to altitude and other environmental circumstances, this operational information is a guideline only. Similar burn rates may be obtained using other settings unique to your situation.

## F. Burn Rates

For maximum operating efficiency with the lowest emissions, follow these operating procedures:

1. Regardless of desired heat output, burn the appliance with both air controls wide open for the first 5 to 15 minutes.
2. Regulate burn rate (heat output) by using the Primary Air Control (center of the grille). The Start-Up Air Control is used for initial start-up and reloading only.
3. Heat output settings: Follow burn rate settings below.
4. Burn dry, well-seasoned wood.

**NOTE:** To establish your settings, always begin with the Primary Air Control pushed all the way in the OPEN setting and then pull out the required distance for the appropriate burn rate.

1. **Starting Fire:** Open (push in) both controls fully. After a wood load has been burning for 5 to 15 minutes (longer for very large pieces) close the Start-Up Air Control by pulling it out.
2. **High Burn Rate:** Leave the Primary Air Control fully open. It is important to do this when reloading the appliance. Failure to do this could result in excessive emissions (opacity/smoke).

**After a wood load has been burning for 5 to 15 minutes on High set the controls as follows for desired burn rate.**

3. **Medium High Burn Rate:** Start with the Primary Air Control pushed in (open) and then pull out 1" to 2-1/2" (25-64mm). Start-Up Air is closed.
4. **Medium Low Burn Rate:** Start with the Primary Air Control pushed in (open) and then pull out 3/4" - 1" (19-25mm). Start-Up Air is closed.
5. **Low Burn Rate:** Gradually close down the Primary Air Control, making sure to maintain flames. (Start-Up Air is closed.) It is very important to maintain flames during the first few hours of a low burn, to avoid excessive air pollution.



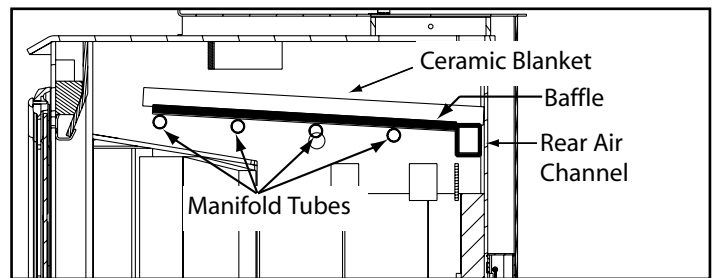
### CAUTION

- Build fire on brick firebox floor.
- Do NOT use grates, andirons or other methods to support fuel.

## G. Building A Fire

Before lighting your first fire:

1. Confirm the baffle is correctly positioned. It should butt up against the rear air channel. **Figure 25.1.**
2. Follow instructions on **page 29** for cleaning plated surfaces.
3. Remove all labels from glass.



**Figure 25.1**



There are many ways to build a fire. The basic principle is to light easily-ignitable tinder or paper, which ignites the fast burning kindling, which in turn ignites the slow-burning firewood. Here is one method that works well:



1. Place several wads of crushed paper on the firebox floor. Heating the flue with slightly crumpled newspaper before adding kindling keeps smoke to a minimum.
2. Lay small dry sticks of kindling on top of the paper.
3. Open Start-Up Air Control and Primary Air Control fully.
4. Make sure that no matches or other combustibles are in the immediate area of the appliance. Be sure the room is adequately ventilated and the flue unobstructed.
5. Light the paper in the appliance. NEVER light or rekindle fire with kerosene, gasoline, or charcoal lighter fluid; the results can be fatal.
6. Once the kindling is burning quickly, add several full-length logs 3 to 4 inches (76 - 102mm) in diameter. Be careful not to smother the fire. Stack the pieces of wood carefully; near enough to keep each other hot, but far enough away from each other to allow adequate air flow between them.
7. When ready to reload, add more logs. Large logs burn slowly, holding a fire longer. Small logs burn fast and hot, giving quick heat.

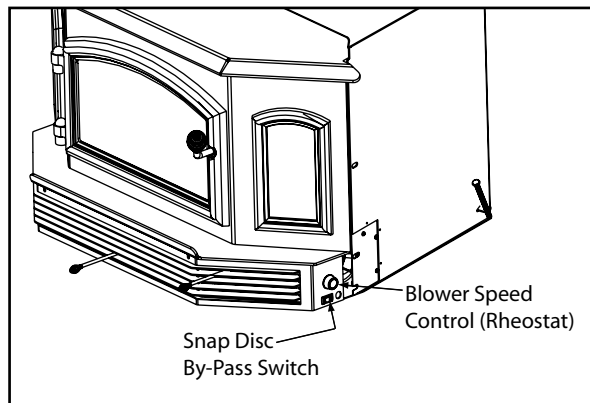
8. Adjust the Start-Up Air Control and Primary Air Control; the more you close down the Primary Air Control, the lower and slower the fire will burn. The more you open the Primary Air Control, the more heat will be produced. The Start-Up Air Control is only used for the first 5 to 15 minutes.

As long as there are hot coals, repeating steps 7 and 8 will maintain a continuous fire throughout the season.

5. The fan is equipped with a rheostat (speed control). The highest fan speed is obtained by turning the rheostat on, then adjusting back towards "OFF" as far as possible without turning the fan off. For a low fan speed, turn the control knob clockwise as far as possible.

	<b>WARNING</b>
	<p><b>Fire Risk</b> Do NOT store wood:</p> <ul style="list-style-type: none"> <li>• Closer than required clearances to combustibles to appliance</li> <li>• Within space required for loading or ash removal.</li> </ul> <p>Do NOT operate appliance:</p> <ul style="list-style-type: none"> <li>• With appliance door open.</li> </ul>

	<b>WARNING</b>
	<p><b>Fire Risk</b></p> <ul style="list-style-type: none"> <li>• Do NOT burn wet or green wood.</li> <li>• Store wood in dry location.</li> <li>• Stack wood so both ends are exposed to air.</li> <li>• Wet, unseasoned wood can cause accumulation of creosote.</li> </ul>



**Figure 26.1**

**I. Opacity (Smoke)**

This is the measure of how cleanly your appliance is burning. Opacity is measured in percent; 100% opacity is when an object is totally obscured by the smoke column from a chimney, and 0% opacity means that no smoke column can be seen. As you become familiar with your appliance, you should periodically check the opacity. This will allow you to know how to burn as nearly smoke-free as possible (goal of 0% opacity).

**H. Blower Operating Instructions**

This appliance is equipped with a 110° thermally operated snap disc which will automatically turn the blower on when the insert reaches this temperature.

The snap disc is located at the center of the insert, under the lower grille. There is a manual override switch on the right side of the insert. The blower can be controlled manually by switching this switch to ON and operating the blower with the speed control. **Figure 26.1**

- 1. Initial (cold) startup:** Leave fan off until your insert is hot and a good coal bed is established, approximately 30 minutes after fuel is lit.
- 2. High Burn Setting:** The fan may be left on throughout the burn.
- 3. Medium or Medium High Burn Setting:** The fan should be left off until a good burn is established, then turned on a medium or high rate.
- 4. Low Burn Setting:** The fan tends to cool the insert. Leave fan off until the burn is well established; then, if you wish, turn the fan on at a low rate.

**J. Frequently Asked Questions**

<b>ISSUES</b>	<b>SOLUTIONS</b>
Odor from appliance	When first operated, this appliance may release an odor for the first several hours. This is caused by the curing of the paint and the burning off of any oils remaining from manufacturing.
Metallic noise	Noise is caused by metal expanding and contracting as it heats up and cools down, similar to the sound produced by a furnace or heating duct. This noise does not affect the operation or longevity of the appliance.
Whirring sound	The blower produces a whirring sound which increases in volume as the speed is increased.

**CAUTION**

Odors and vapors are released during initial operation.

- Curing of high temperature paint.
- Open windows for air circulation.

Odors may be irritating to sensitive individuals.

# 9

## Maintaining & Servicing Your Appliance

### A. General Maintenance

#### 1. Creosote (Chimney) Cleaning


- **Frequency:** Annually or once every 2 months during heating season.
- **By:** Homeowner / Chimney Sweep
- **Task:** Remove all ash from the firebox and extinguish all hot embers before disposal. Allow the appliance to cool completely. If the chimney has a full reline, remove the baffle, ceramic blanket and manifold tubes from the insert before cleaning chimney. Otherwise residue can pile up on top of the baffle and the appliance will not work properly. (See Baffle Removal on **page 32**). Close the door tightly. The creosote or soot should be removed with a brush specifically designed for the type of chimney in use. Clean out fallen ashes from the firebox.


If the insert is a direct connect within a masonry chimney, remove the insert from the fireplace. The creosote or soot can be caught in a large garbage bag secured to the pipe. Clean any remaining debris from fireplace smoke shelf.

It is also recommended that before each heating season the entire system be professionally inspected, cleaned and repaired if necessary. Close the door tightly. The creosote or soot should be removed with a brush specifically designed for the type of chimney in use. Clean out fallen ashes from the firebox.

**Inspection:** Inspect the system at the appliance connection and at the chimney top. Cooler surfaces tend to build creosote deposits quicker, so it is important to check the chimney from the top as well as from the bottom.


**Formation and Need For Removal:** When wood is burned slowly, it produces tar and other organic vapors which combine with expelled moisture to form creosote. The creosote vapors condense in the relatively cool chimney flue of a newly-started or a slow-burning fire. As a result, creosote residue accumulates on the flue lining. When ignited, this creosote creates an extremely hot fire which may damage the chimney or even destroy the house. The chimney connector and chimney should be inspected once every 2 months during the heating season to determine if a creosote or soot buildup has occurred. If creosote or soot has accumulated, it should be removed to reduce the risk of a chimney fire.

	<b>WARNING</b>
	<p>Fire Risk.</p> <ul style="list-style-type: none"> <li>• Do not use chimney cleaners or flame colorants in your appliance</li> <li>• Will corrode pipe.</li> </ul>

	<b>WARNING</b>
	<p>Fire Hazard. Prevent creosote buildup.</p> <ul style="list-style-type: none"> <li>• Inspect chimney connector and chimney once every two months during heating season.</li> <li>• Remove creosote to reduce risk of chimney fire.</li> <li>• Ignited creosote is extremely HOT.</li> </ul>

#### 3. Disposal of Ashes

- **Frequency:** As necessary
- **By:** Homeowner
- **Task:** Ashes should be placed in a metal container with a tight fitting lid. The closed container of ashes should be placed on a noncombustible floor or on the ground, well away from all combustible materials, pending final disposal. If the ashes are disposed of by burial in soil or otherwise locally dispersed, they should be retained in the closed container until all cinders have thoroughly cooled.

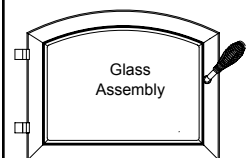
	<b>WARNING</b>
	<p>Risk of Fire Disposal of Ashes</p> <ul style="list-style-type: none"> <li>• Ashes should be placed in metal container with tight fitting lid.</li> <li>• Do not place metal container on combustible surface.</li> <li>• Ashes should be retained in closed container until all cinders have thoroughly cooled.</li> </ul>

#### 4. Glass Cleaning

- **Frequency:** As necessary
- **By:** Homeowner
- **Task:** Clean glass with a nonabrasive glass cleaner. Abrasive cleaners may scratch and cause glass to crack. If the deposits on the glass are not very heavy, normal glass cleaners work well. Heavier deposits may be removed by using a damp cloth dipped in wood ashes or by using a commercially available oven cleaner. After using an oven cleaner, it is advisable to remove any residue with a glass cleaner or soap and water. Oven cleaner left on during the next firing can permanently stain the glass and damage the finish on plated metal surfaces.

A portion of the combustion air entering the firebox is deflected down over the inside of the door glass. This air flow “washes” the glass, helping to keep smoke from adhering to its surface. When operated at a low burn rate, less air will be flowing over the glass and the smoky, relatively cool condition of a low fire will cause the glass to become coated. Operating the appliance with the Primary Air Control all the way open for 15-20 minutes should remove the built up coating.

## CAUTION



Handle glass assembly with care.

### When cleaning glass:

- Avoid striking, scratching or slamming glass.
- Do NOT clean glass when hot.
- Do NOT use abrasive cleaners.
- Use a hard water deposit glass cleaner on white film.
- Use commercial oven cleaner on heavier deposits.
- Remove all residue of oven cleaner or will permanently stain glass on next firing.
- Refer to maintenance instructions.

## 5. Cleaning Plated Surfaces

- **Frequency:** As necessary
- **By:** Homeowner
- **Task:** Clean all the fingerprints and oils from plated surfaces **BEFORE** firing the appliance for the first time. If not cleaned properly before lighting your first fire, the oils can cause permanent markings on the plating. Use warm soapy water and a soft rag, glass cleaner and a paper towel, or vinegar and a paper towel to remove the oils. After the plating is cured, the oils will not affect the finish and little maintenance is required. Wipe clean as needed.

## CAUTION

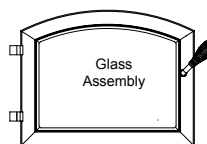
- Do not use polishes with abrasives, it will scratch plated surface.

## B. Glass Replacement - Door Assembly

- **Frequency:** As needed
- **By:** Homeowner / Qualified service technician
- **Task:** See the following instructions.
  1. Ensure that the fire is out and the appliance is cool to the touch.
  2. Protect a table or counter top with padding or towels.
  3. Remove the door with the broken glass by lifting the door up and off of the hinges.
  4. Lay door face down on a table or counter making sure the handle hangs over the edge so the door lays flat, on a soft surface.
  5. Remove the screws from each glass retainer and remove the glass. (If screws are difficult to remove, soak with penetrating oil first).
  6. Center the new glass with edges evenly overlapping the opening in the door, (i.e. same space top and bottom, left and right sides).
  7. Replace the glass retainers. Be careful not to cross thread the screws.
  8. Tighten each retainer just a few turns until each is secured. Check again for centering of glass in door frame. Continue to tighten each retainer alternately, a few turns at a time, until the glass is secure. **DO NOT OVERTIGHTEN.**
  9. Replace the door on the appliance.

Quadra-Fire stoves are equipped with ceramic super heat-resistant glass, which can only be broken by impact or misuse. Do not slam stove door or impact the glass. When closing door, make sure that logs do not protrude against the glass. Inspect glass regularly. If you find a crack or break, immediately put the fire out and return the door to your dealer for replacement of glass before further use.

## WARNING



Handle glass with care.

- Inspect the gasket to ensure it is undamaged.
- Do NOT strike, slam or scratch glass.
- Do NOT operate appliance with glass & door assembly removed.
- Do NOT operate with glass cracked, broken or scratched.

## WARNING

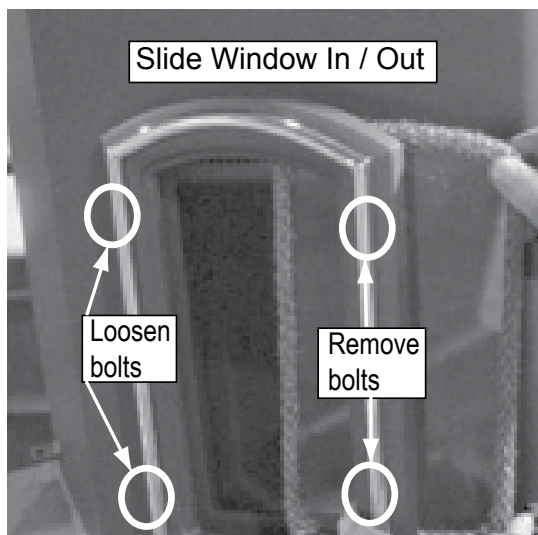


Fire or Injury Risk

- Use only glass specified in manual.
- DO NOT REPLACE with any other material.

**C. Glass Replacement - Side Window**

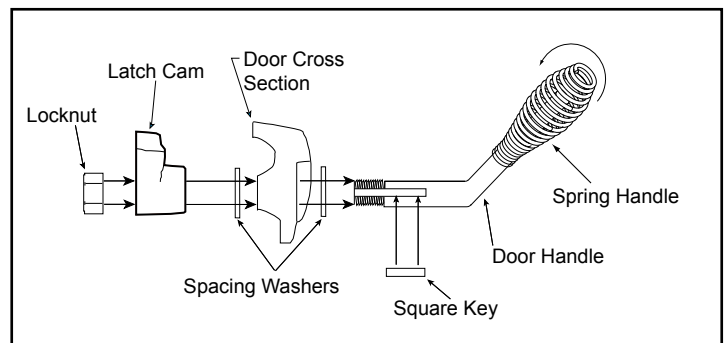
- **Frequency:** As needed
- **By:** Homeowner / Qualified service technician
- **Task:** See the following instructions.
  1. Open door and remove vertical brick in the bay window area.
  2. Reach inside firebox and loosen 4 hex bolts using a 3/8 inch socket wrench holding the cast in place.
  3. Only remove the 2 bolts, top and bottom on the side closest to the firebox opening. **Figure 30.1**
  4. Open the side of the window where the bolts have been removed and slide out glass.
  5. Slide new glass in making sure it slides into the cast grooves.
  6. Re-assemble in reverse order. Do not overtighten bolts.



**Figure 30.1**

**D. Door Handle Assembly Replacement**

- **Frequency:** As needed
- **By:** Homeowner / Qualified service technician
- **Task:** See the following instructions.
  1. Install washer on door handle shaft.
  2. Slide door handle through door.
  3. Install second washer(s) as shown.
  4. Install key in groove.
  5. Align groove in latch cam with key; slide latch cam over shaft
  6. Install locknut.
  7. Install spring handle turning in a counter-clockwise motion to desired location on handle.



**Figure 30.2**

<b>CAUTION</b>
<ul style="list-style-type: none"> <li>• Do NOT overtighten lock nut.</li> <li>• Door handle needs to move smoothly.</li> </ul>

**E. Firebrick Replacement**

- **Frequency:** As needed
- **By:** Homeowner / Qualified service technician
- **Task:** See the following instructions.

The firebox is lined with high quality firebrick, which has exceptional insulating properties. There is no need to use a grate; simply build a fire on the firebox floor. Do not operate appliance without firebrick.

1. Be certain coals are completely cold. Remove all old brick and ash from unit and vacuum out firebox.
2. Remove new brick set from box and lay out to diagram as shown.
3. Lay bottom bricks in unit.
4. Install rear bricks on the top of the bottom bricks. Slide top of bricks under clip on back of firebox wall and push bottom of brick back.
5. Install side bricks. Slide top of brick under clips on side of firebox and push the bottom of the brick until it is flush with the side of the unit.

**NOTE: Do not operate unit with any firebrick missing. It will void the warranty.**

Nbr	Brick Size	Qty
1	9 x 4-1/2 x 1-1/4"	14
2*	9 x 4-1/2 x 1/1/4" with hole	2
3	9 x 3 x 1-1/4"	2
4	8-1/2 x 1-3/4 x 1-1/4"	2
5	3 x 1-3/4 x 1-1/4"	1
6	9 x 2 x 1-1/4"	2
7	see drawing, Figure 31.2	2
8	see drawing, Figure 31.2	2
9	see drawing, Figure 31.2	2
10	7-1/2 x 3-1/2 x 1-1/4"	2
11	9 x 2-1/4 x 1-1/4"	1
12	8-3/4" X 2-1/4" X 1-1/4"	2

Use Part 832-0550 when ordering individual brick. Provide brick dimension or copy this page, mark the desired brick and take it to your authorized dealer.

\* Use Part SRV436-0380 when ordering the 2 bricks with holes.

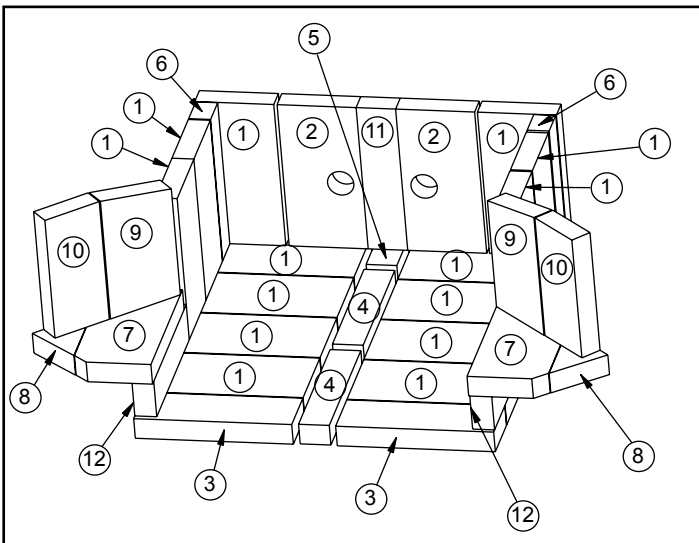


Figure 31.1

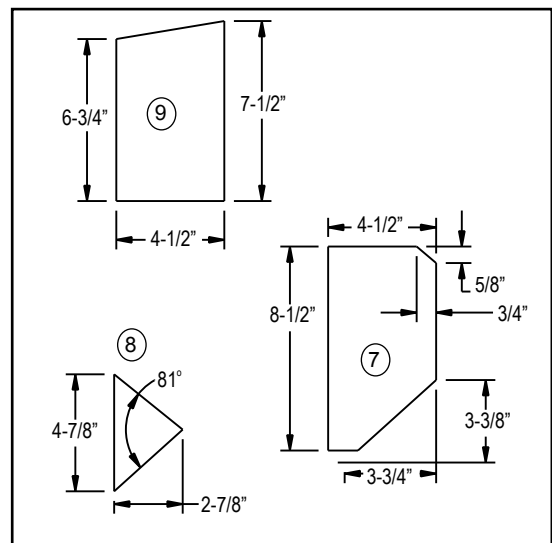
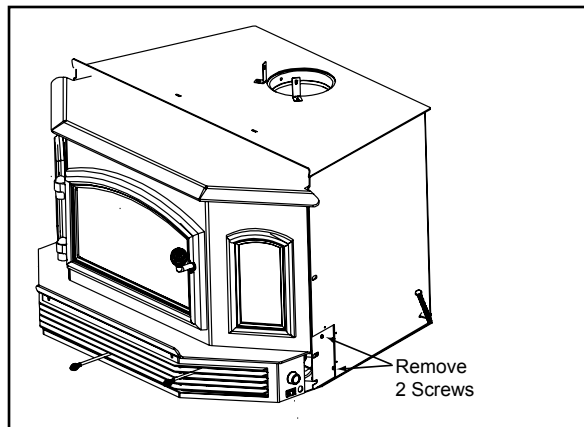


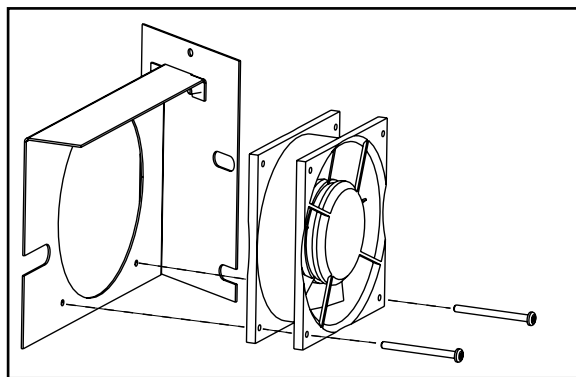
Figure 31.2

**F. Blower Replacement**

- **Frequency:** As needed
  - **By:** Homeowner / Qualified service technician
  - **Task:** See the following instructions.
1. Remove the panel and trim set. See **pages 20-21** for complete details.
  2. Remove 2 screws on blower housing.
  3. Unhook the wires from the blower.
  4. Slide blower housing out.
  5. Remove 2 screws from blower and remove from housing.
  6. Attach new blower to housing.
  7. Re-assemble in reverse order.



**Figure 32.1**

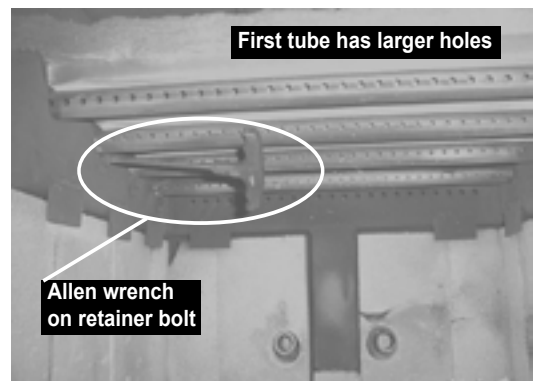


**Figure 32.2**

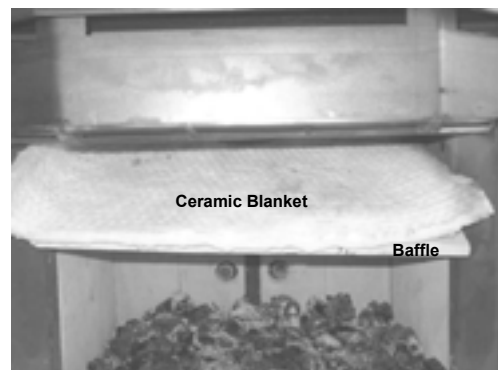
**G. Baffle Removal**

- **Frequency:** As needed
  - **By:** Homeowner / Qualified service technician
  - **Task:** See the following instructions.
1. Remove all ash from firebox, and extinguish all hot embers before disposal into a metal container.
  2. Remove ceramic blanket from above the baffle.
  3. With a 3/16 inch Allen wrench, remove 2 front manifold tube retainer bolts on the air channel under the end of the front tubes. **NOTE:** Soak the bolts with penetrating oil for at least 15 minutes before trying to remove them. **Figure 32.3**
  4. To remove manifold tubes, slide the tube to one side until one end is out of its hole. Then, while lifting that end of the fiber board baffle, pull tube up over the air channel and out of hole at the other end. It is necessary to remove the first two tubes in order to remove the baffle. **NOTE:** When replacing the manifold tubes, be sure the tube with the larger holes is placed in the front for your insert to operate properly.
  5. Slide fiber board baffle forward to front of stove and straight out through door. **Figure 32.4**
  6. To install the fiber board baffle, repeat steps 2 through 4 in reverse. Be sure the fiber board baffle and ceramic blanket are pushed back fully into position.

**NOTE: The baffle is constructed of 2700° Fiber Board.**



**Figure 32.3**



**Figure 32.4**



**H. Correct Baffle & Blanket Placement**

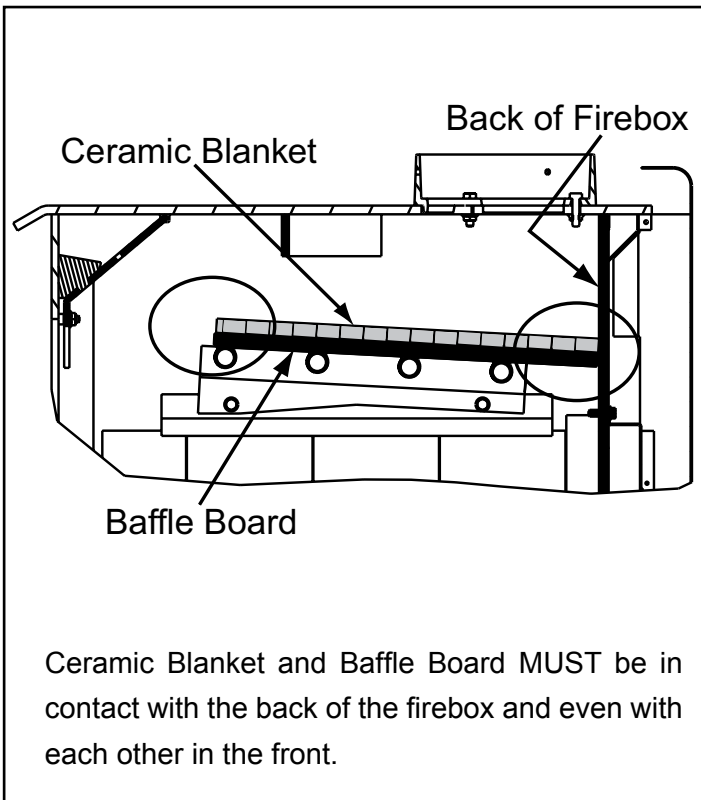
## WARNING

**Fire Risk**  
 Firebox damage due to improper baffle placement is not covered by warranty. Operate the wood burning appliance with the baffle in the correct position only. Not doing so could result in:

- Reduced efficiency
- Overheating the chimney
- Overheating the rear of the firebox
- Poor performance

Ensure correct baffle placement and replace baffle components if damaged or missing.

**CORRECT POSITION**



**Figure 29.1**

**INCORRECT POSITIONS**

Ceramic Blanket and Baffle Board are **NOT** in contact with the back of the firebox.

Ceramic Blanket is **NOT** in contact with the back of the firebox and **NOT** even with the Baffle Board in the front.

Ceramic Blanket

Back of Firebox

Baffle Board

Ceramic Blanket is bunched up at the back of the firebox and **NOT** even with the Baffle Board in the front.

**Figure 29.2**

# 10 Troubleshooting

With proper installation, operation, and maintenance your appliance provide years of trouble-free service. If you do experience a problem, this troubleshooting guide will assist a qualified service person in the diagnosis of a problem and the corrective action to be taken.

## 1. If I can't get a good fire going, what am I doing wrong?

Diagnostic Question	Possible Causes of Condition	Solutions
Are the air controls open?	<ul style="list-style-type: none"> <li>No draft</li> <li>No combustion air</li> </ul>	Open air controls
Is there enough paper?	Insufficient heat to ignite kindling	Use more paper
Is there enough kindling? Is the kindling dry?	Insufficient heat to ignite fuel	Use drier kindling
Is there enough or too much wood? Is it too large? Is it dry enough?	<ul style="list-style-type: none"> <li>Insufficient heat to establish draft</li> <li>Insufficient air passage</li> <li>Insufficient surface area</li> <li>Ignition temperature high due to moisture</li> </ul>	Use small split wood that is well seasoned (split, covered on top minimum 6 months, preferably a year)
Are there adequate air spaces between fuel pieces?	Insufficient combustion air and exposed surface area	Arrange kindling and wood for air movement
Is the chimney pre-warmed?	Exposed, cold chimney downdrafting	Use lighted rolled newspaper at flue opening to start upward air movement
Is there smoke in the house?	<ul style="list-style-type: none"> <li>Obstruction in chimney</li> <li>Downdraft from chimney temperature or from negative house pressure</li> </ul>	<ul style="list-style-type: none"> <li>Have chimney checked if it worked previously</li> <li>Pre-warm chimney</li> <li>Shut off exhaust devices</li> <li>Open window slightly</li> </ul>
Does the kindling wood not ignite?	Condition, amount, arrangement of kindling and fuel	Use more, drier, well-spaced kindling and fuel.
Does the kindling ignite, but the fuel doesn't?	<ul style="list-style-type: none"> <li>Amount of kindling</li> <li>Condition of fuel</li> </ul>	<ul style="list-style-type: none"> <li>Use more kindling</li> <li>Use smaller, dry wood</li> </ul>
Does the fuel ignite, but not burn well?	<ul style="list-style-type: none"> <li>Draft problem</li> <li>Condition of fuel</li> </ul>	<ul style="list-style-type: none"> <li>Use well-seasoned wood and sufficient amount</li> <li>Turn exhaust fans off</li> <li>Open window slightly</li> </ul>

## 2. I smell smoke in the house after we have had a fire. What is the cause/what can I do?

Diagnostic Question	Possible Causes of Condition	Solutions
Is the chimney clean?	No: Creosote odor	Have chimney cleaned

### 3. I smell smoke in the house during operation. What is causing it?

Diagnostic Question	Possible Causes of Condition	Solutions
Do fires start and burn well?	No: <ul style="list-style-type: none"> <li>• Chimney obstruction</li> <li>• Not enough kindling and/or fuel to establish draft</li> <li>• Inadequate combustion air</li> <li>• Air controls not open</li> </ul> Yes: Competition with exhaust devices	No: <ul style="list-style-type: none"> <li>• Check &amp; clean chimney if needed</li> <li>• Use adequate kindling &amp; fuel</li> <li>• Open air controls</li> <li>• Open window</li> <li>• Check for need for balanced air make-up (Outside Air)</li> </ul> Yes: <ul style="list-style-type: none"> <li>• Do not use exhaust fans during startup</li> <li>• Check for need for balanced air make-up (Outside Air)</li> </ul>

### 4. I don't get enough/any heat. What can I do about it?

Diagnostic Question	Possible Causes of Condition	Solutions
How much wood is used for fire?	Insufficient fuel	Make larger fires
How well seasoned is the wood?	Condition of fuel	Burn seasoned wood: (split, covered on top minimum 6 months, preferably a year)
Is blower operating properly?	Snap disc not working Is blower plugged in? Setting to high on blower cooling firebox.	Replace snap disc Plug in blower Turn blower to lower setting
How are air controls set?	Operational problems	Follow manufacturer's instructions

### 5. The wood burns too fast. What can I do?

Diagnostic Question	Possible Causes of Condition	Solutions
What is the condition of the wood?	Extremely dry wood	Mix in less seasoned wood after fire established
How are air controls set?	Operational problems	Follow manufacturer's instructions

### 6. The blower does not come on when insert reaches set temperate. What can I do?

Diagnostic Question	Possible Causes of Condition	Solutions
Is blower operating properly?	Snap disc not working	Replace snap disc

# 11

## Reference Materials

### A. Exploded Views

Beginning Manufactured Date: November 1, 2004

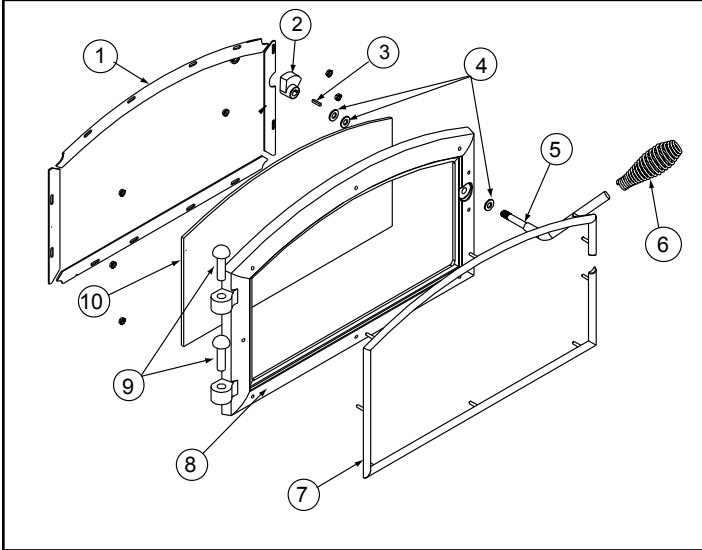


Figure 36.1 - Front Door & Glass Assembly

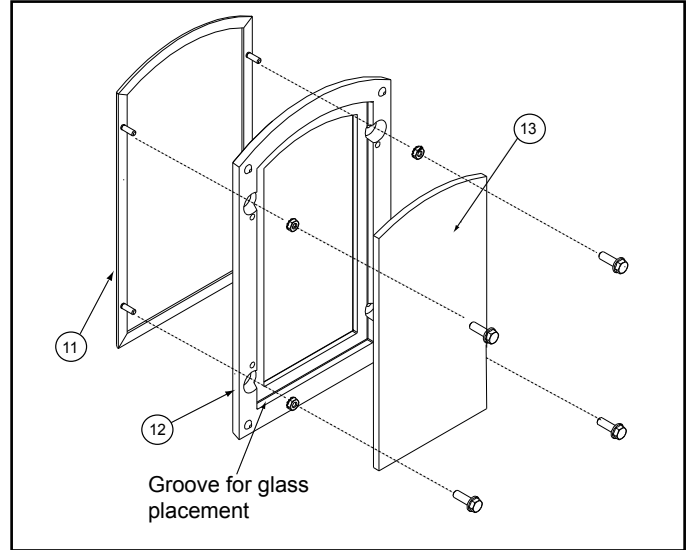


Figure 36.2 - Side Window

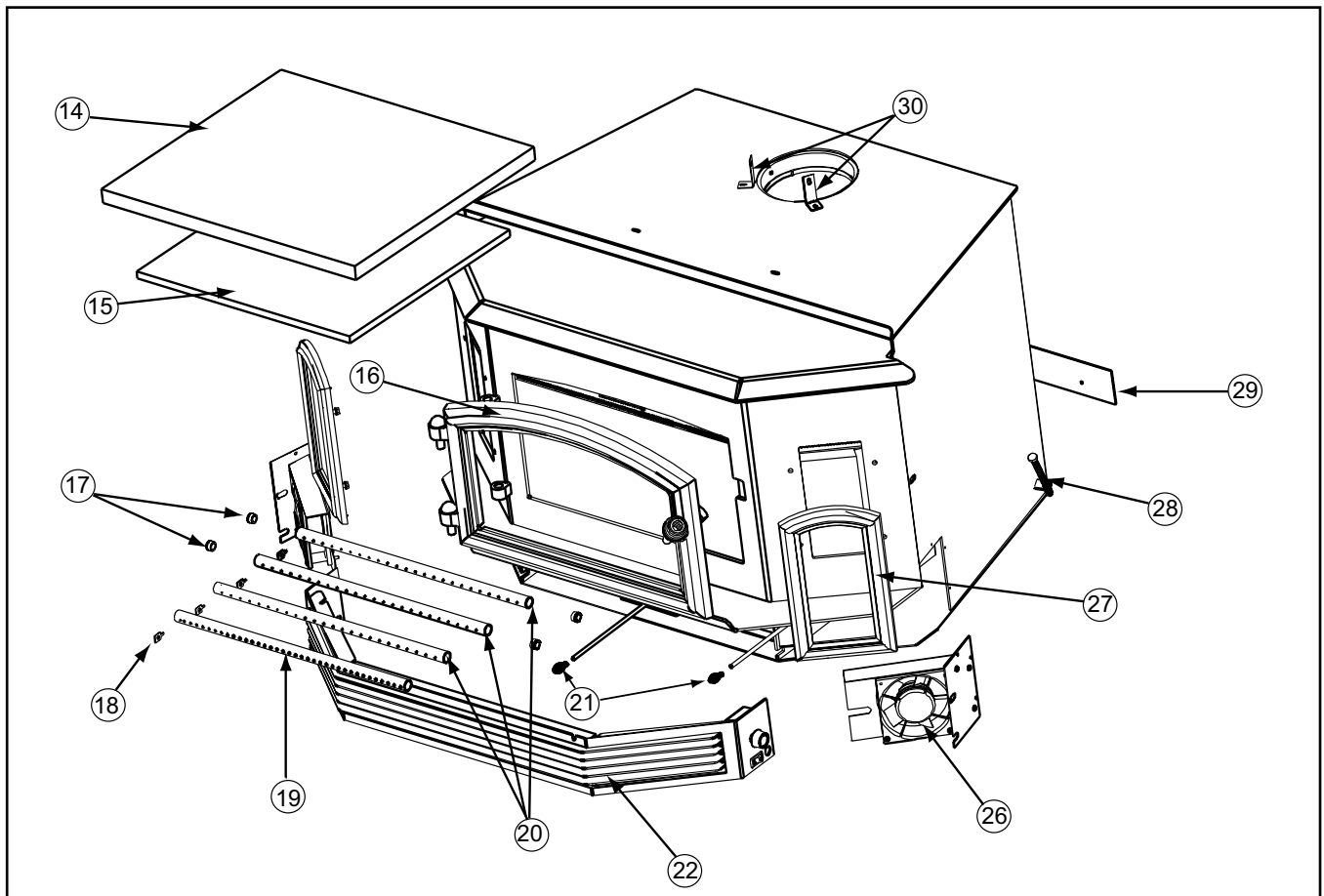


Figure 36.3 - Wood Insert

**B. Service Parts & Accessories**

**IMPORTANT:** THIS IS DATED INFORMATION. The most current information is located on the Quadra-Fire web site at [www.quadrafire.com](http://www.quadrafire.com). When ordering, supply serial and model numbers to ensure correct part.

Item #	Part Description Alphabetical Order	SKU
15	Baffle, Fiberboard	438-0320
14	Blanket, Ceramic, 1/2 inch	832-3390
26	Blower Motor Only	832-3190
	Blower Cord Only	832-2410
	Bricks with holes (2 )	SRV436-0380
	Brick, Single, give dimensions needed, see page 31	832-0550
	Brick Set for Firebox	BRICK-438
	Component Pack, includes owner's manual & warranty card, touch-up paint, (1) spring handle 1/2", (2) air control spring handles 1/4", (2) leveling bolts, permanent label "If Fireplace Altered", EPA & Sales efficiency cards	Gold Handles 438-5510  Nickel Handles 438-5570
16	Door Assembly, Gold Trim	DR-27GD
16	Door Assembly, Nickel Trim	DR-27NL
16	Door Assembly, Black	DR-27BK
	Door Handle Assembly	832-0540
5	Door Handle, Formed	430-1131
7	Door Trim Ring Only, Gold	430-2702
7	Door Trim Ring Only, Nickel	430-5350
30	Flue Tabs	438-0010
	Gasket (Rope) for Door, 3/4 inch	832-1680
	Gasket, (Tape) for Glass, 3/4 inch	832-0460
	Gasket, (Tape) 3/4 inch x 500 ft	842-3520
10	Glass Assembly, Door	7000-011
13	Glass Assembly, Window, left & right are interchangeable	832-2000
1	Glass Frame Set	832-1540
22	Grille Assembly, Gold	832-3100
22	Grille Assembly, Nickel	832-3100NL
	Grille, Louver, Black, 1 piece	430-3770
	Grille, Louver, Gold, 1 piece	430-3830
	Grille, Louver, Nickel, 1 piece	430-5460
	Grille, Panel (Frame only)	SRV438-5610
9	Hinge Pins, Gold (2)	832-0250
9	Hinge Pins, Nickel (2)	430-5320
3	Latch Cam Key, Door Handle	430-1151
2	Latch Cam, Door Handle	430-1141
28	Leveling Bolt	223-0140
	Louver Assembly, Grille, Gold	438-5480
	Louver Assembly, Grill, Nickel	438-5530
18	Manifold Locator clip & 4 screws	832-0661

Item #	Part Description Alphabetical Order	SKU
19	Manifold Tube #1	7000-198
20	Manifold Tube, #2, #3, #4	7006-176
17	Manifold Bushings for Tubes #3 and #4	438-0370
29	Outside Air Cover Plate	430-2480
	Rivnut Repair Kit	RIVNUT-REPAIR
	Snap Disc	230-0960
	Speed Control Knob	200-2041
	Speed Control (Rheostat)	842-0370
21	Spring Handles (2), Air Control, 1/4" Gold	832-0630
21	Spring Handle (1), Air Control, 1/4" Nickel	250-8340
6	Spring Handle, Door 1/2", Gold	832-0620
6	Spring Handle, Door 1/2", Nickel	250-8330
	Switch, Rocker (Snap Disc by-pass)	230-0730
4	Washer, SAE 3/8, for Door Handle	832-0990
27	Window Assembly, Side, Gold Trim	438-5440
27	Window Assembly, Side, Nickel Trim	438-5560
11	Window Trim Ring Only, Gold	430-2721
11	Window Trim Ring Only, Nickel	430-5360
	Wire Harness	832-3270

**Accessories**

Part Description Alphabetical Order	Serial Number	SKU
Grille Assembly, Gold		832-3100
Grille Assembly, Nickel		832-3100NL
Panel, Standard, Gold, 30-1/2" h x 47" w		831-1452
Panel Standard, Nickel, 30-1/2" h x 47" w		SP-51S-NL
Panel, Large, Gold, 34-1/4" h x 51-1/4" w		831-1461
Panel, Large, Nickel, 34-1/4" h x 51-1/4" w		SP-51L-NL
Offset Adapter		831-0182
Zero Clearance Adjustable Trim Support, 12" d x 50" w, 2-10" h		ADJSPT-12







**D. Homeowner's Notes**

**E. Warranty Policy**

**Hearth & Home Technologies LIMITED WARRANTY**

Hearth & Home Technologies (“HHT”) and its respective brands extends the following warranty for HHT gas, wood, pellet and electric appliances purchased from an authorized HHT dealer and installed in the United States of America or Canada. Warranty starts with date of purchase by the original owner (End User) except as noted for replacement parts.

Warranty Period		HHT Manufactured Appliances and Venting						Components Covered
Parts	Labor	Gas	Wood	Pellet	EPA Wood	Electric	Venting	
1 Year		X	X	X	X	X	X	All Parts and Material Except as covered by Conditions, Exclusion, and Limitations listed
2 years				X	X			Igniters, Electronic Components, and Glass
		X	X	X	X			Blowers
			X					Molded Refractory Panels
3 years				X				Firepots
5 years	3 years			X	X			Castings & Baffles
7 years	3 years		X	X	X			Firebox, HHT Chimney, Termination & Heat Exchanger
10 years	1 year	X						Burners, Logs & Refractory
Limited Lifetime	1 year	X						Firebox & Heat Exchanger
90 Days		X	X	X	X	X	X	All Replacement Parts
See Conditions, Exclusions, and limitations.							9-01-08	

**CONDITIONS, EXCLUSIONS & LIMITATION OF LIABILITY**

- This warranty applies to the original owner and is transferable up to two years from date of purchase to the new homeowner, provided the purchase was made through an authorized dealer or distributor of HHT, and the appliance remains in its original place of installation.
- The maximum amount recoverable under this warranty is limited to the purchase price of the product.
- In no event shall HHT be liable for any incidental or consequential damages caused by defects in the product.
- Adjustments, regular maintenance, cleaning and temporary repairs, or the failure to duplicate the problem in the home is not covered under this warranty.
- This limited warranty does not extend to or include surface finish on the appliance or terminations, door gasketing, glass gasketing, glass discoloration, firebrick, pellet logs, kaowool or other ceramic insulating materials. Rust and/or corrosion on any of the metal surfaces, cast iron components, baffles, firepots, doors, or firebox area are not covered by this warranty.
- Noise resulting from minor expansion, contraction, or movement of certain parts is normal and complaints related to this noise are not covered by this warranty.

**Hearth & Home Technologies LIMITED WARRANTY (Cont'd)**

- HHT's obligation under this warranty does not extend to damages resulting from: (1) installation, operation or maintenance of the appliance not in accordance with the installation instructions; operating instructions and the listing agent identification label furnished with the appliance; (2) installation which does not comply with local building codes; (3) shipping, improper handling, improper operation, abuse, misuse, accident or unworkmanlike repairs; (4) environmental conditions, inadequate ventilation or drafting caused by tight sealing construction of the structure or handling devices such as exhaust fans or forced air furnaces or other such causes; (5) use of fuels other than those specified in the operating instructions; (6) installation or use of components not supplied with the appliance or any other components not expressly authorized and approved by HHT; and/or (7) modification of the appliance not expressly authorized and approved by HHT in writing.
- This warranty does not apply to non-HHT venting components, hearth components or other accessories used in conjunction with the installation of this product.
- This warranty is void if the appliance has been over-fired or operated in atmospheres contaminated by chlorine, fluorine, or other damaging chemicals the appliance is subject to prolonged periods of dampness or condensation, or there is any damage to the appliance or other components due to water or weather damage which is the result of, but not limited to, improper chimney or venting installation.
- HHT's liability under this warranty is limited to the replacement and repair of defective components or workmanship during the applicable period. HHT may fully discharge all of its obligations under such warranties by repairing the defective component(s) at HHT's discretion. Shipping costs are not covered under this warranty.
- Some states do not allow exclusions or limitation of incidental or consequential damages, so those limitations may not apply to you. This warranty gives you specific rights; you may also have other rights, which vary from state to state.
- EXCEPT TO THE EXTENT PROVIDED BY LAW, HHT MAKES NO EXPRESS WARRANTIES OTHER THAN THE WARRANTY SPECIFIED HEREIN. THE DURATION OF ANY IMPLIED WARRANTY IS LIMITED TO DURATION OF THE WARRANTY SPECIFIED ABOVE.

*This Limited Warranty is effective on all HHT appliances sold after September 01, 2008 and supersedes any and all warranties currently in existence.*



If warranty service is needed, you should contact your installing dealer. If the installing dealer is unable to provide necessary parts or components, contact the nearest authorized HHT dealer or supplier.

# QUADRA-FIRE®

## CONTACT INFORMATION:

Hearth & Home Technologies  
1445 North Highway  
Colville, WA 99114  
Division of HNI INDUSTRIES

Please contact your Quadra-Fire dealer with any questions or concerns.  
For the number of your nearest Quadra-Fire dealer,  
please visit our web site at [www.quadrafire.com](http://www.quadrafire.com)

	<b>CAUTION</b>
	<ul style="list-style-type: none"><li>• Do NOT discard this manual.</li><li>• Important operating and maintenance instructions included.</li><li>• Read, understand and follow these instructions for safe installation and operation.</li><li>• Leave this manual with party responsible for use and operation.</li></ul>



### Your Records for Model: 5100-I Wood Insert (ACT)

DEALERSHIP WHERE PURCHASED:

SERIAL NUMBER: \_\_\_\_\_

DATE PURCHASED: \_\_\_\_\_

DATE INSTALLED: \_\_\_\_\_

DEALER TELEPHONE: \_\_\_\_\_

This product may be covered by one or more of the following patents: (United States) 4593510, 4686807, 4766876, 4793322, 4811534, 5000162, 5016609, 5076254, 5113843, 5191877, 5218953, 5263471, 5328356, 5341794, 5347983, 5429495, 5452708, 5542407, 5601073, 5613487, 5647340, 5688568, 5762062, 5775408, 5890485, 5931661, 5941237, 5947112, 5996575, 6006743, 6019099, 6048195, 6053165, 6145502, 6170481, 6237588, 6296474, 6374822, 6413079, 6439226, 6484712, 6543698, 6550687, 6601579, 6672860, 6688302B2, 6715724B2, 6729551, 6736133, 6748940, 6748942, 6769426, 6774802, 6796302, 6840261, 6848441, 6863064, 6866205, 6869278, 6875012, 6880275, 6908039, 6919884, D320652, D445174, D462436; (Canada) 1297749, 2195264, 2225408, 2313972; (Australia) 780250, 780403, 1418504 or other U.S. and foreign patents pending.

